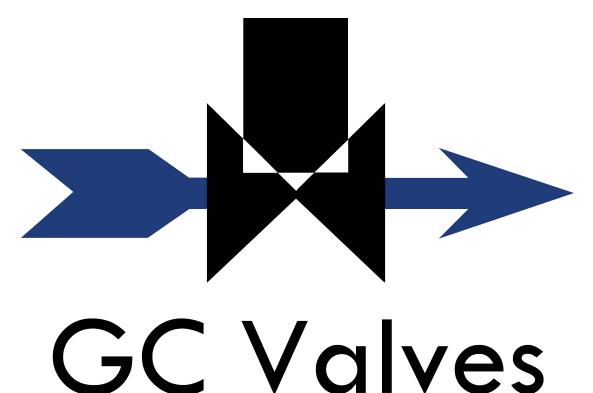
Revision 11, August, 2024



A DEMA Company

NSF Approved Solenoid Valves



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

GC Valves

True Union Solenoid Valves

Nylon-6 • ½" & ¾" NPT Pipe Size

Applications

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

Features

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

Construction

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

Coil Housing

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

•DIN - 18mm Form A (NEMA 4/4X, IP65)

•Junction Box (Single or Dual Knockouts)

TP3 Series (See Drawing #2)

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

*See Engineering Guide for Additional Coil Housings and Dimensions



Ambient Temperature (Nominal)

•32°F to 125°F (0°C to 52°C)

Maximum Fluid Temperature

•180°F (82°C)

Approvals

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

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

CE Certified

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

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





True Union Solenoid Valves

Nylon-6 • ½" & ¾" NPT Pipe Size

NSF Certified Valve Specifications

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

NSF

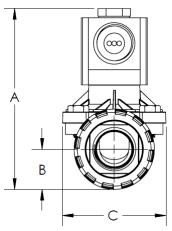
NSF Certified Part Number Selection

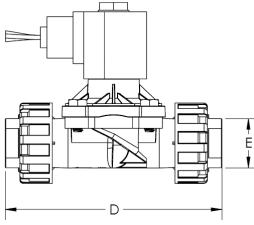
Ν	T20	1	G	Н	02	С	Ρ	D	2	(blank)
Prefix	True	Operating	Housing	Coil Class	Voltage ③	Seal	Body	Pipe	Number	Optional
	Union	Mode(1)				Material	Material	Connection	of	Suffix
	Series								Unions	
N: NSF	T20	1 : 2WNC	G: Lead	H: H Class	02 :110v/50Hz	C: EPDM	P: Nylon	D : ½" NPT	0 : No	(blank):
Certified ④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



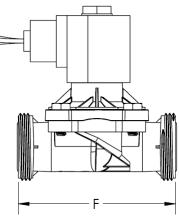
True Union Solenoid Valves

Nylon-6 • ½" & ¾" NPT Pipe Size



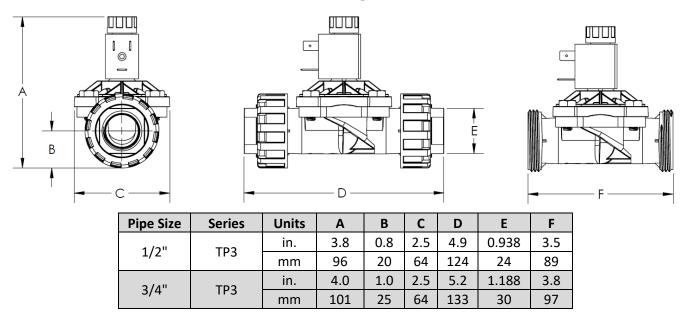


Drawing #1



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

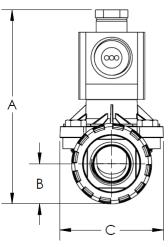
Drawing #2

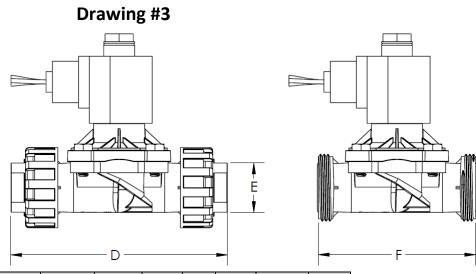




True Union Solenoid Valves

Nylon-6 • ½" & ¾" NPT Pipe Size





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



Solenoid Valves For Drinking Water

S20 & S21 Series

Stainless Steel & Noryl Solenoid Valves



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

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

The NSF valves also meet "Lead Free"

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

Application Data

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

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

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

Annex G

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

NSF/ANSI Standard 372

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

To learn more,

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

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



NS301 Series

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

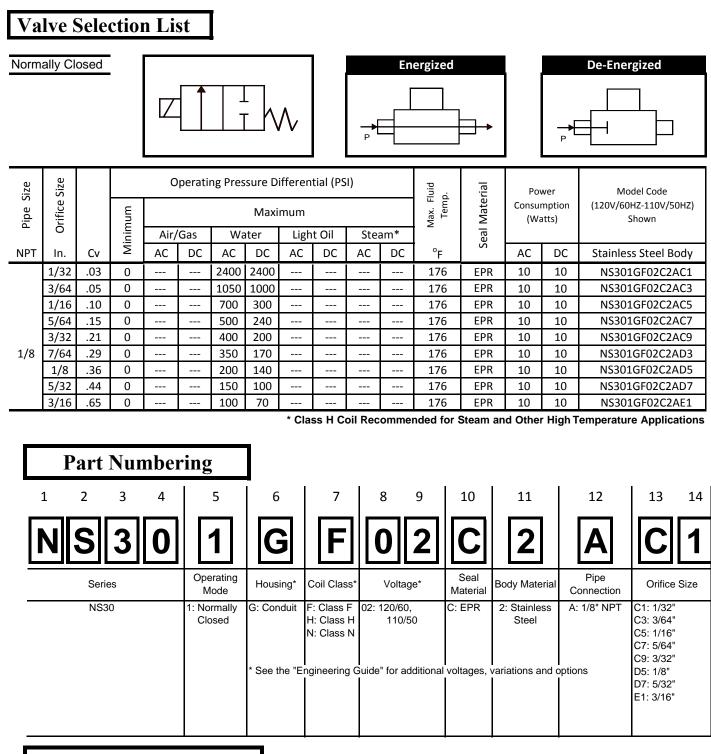


Materials	Seals:	NSF Approved EPDM
	Orifice:	Stainless Steel
Electrical	Standard Housing:	NEAM 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:	Contact GC Valves Customer Service for available
		options.
	Standard Voltages:	24, 120, 240, AC, 60 and/or 50 Hz. Available
		6, 12, 24 DC
		Contact GC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

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

1/8-S-NS301-1

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



Coil Data

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

NS31 Series



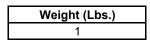
- 1/8" NPT
- 303 Stainless Steel Body
- 2-Way Zero Differential
- Direct Acting
- Normally Closed

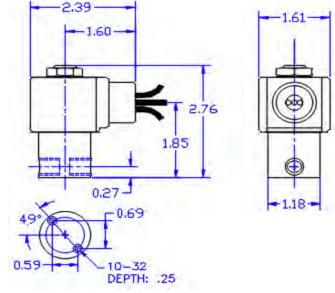


Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Stainless Steel
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

* Not available for all variations

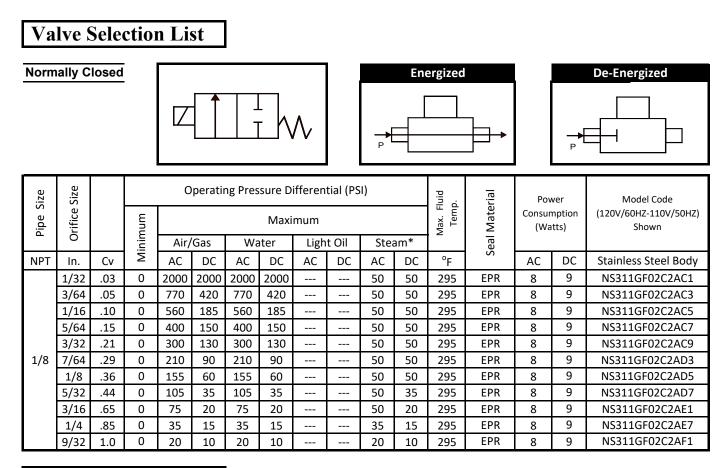
Dimensions / Weight





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

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



Part Numbering

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

Coil Data

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

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

1-8-S-NS311-2

NS312 Series



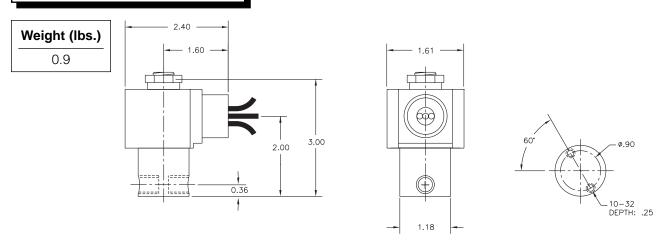
1/8" NPTStainless Steel2-Way Direct ActingNormally Open



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

* Not available for all variations

Dimensions/Weight



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

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

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

Coil Data

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

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

NS30 Series



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

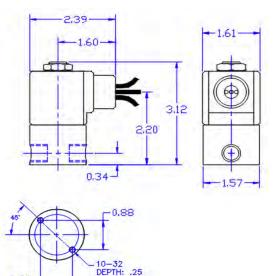


Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Stainless Steel
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
1.2	

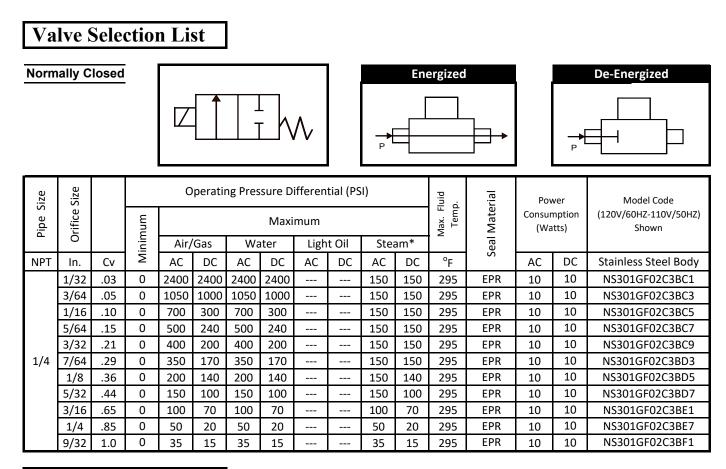


GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

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1-4-S-NS301-1

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



Part Numbering

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

Coil Data

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

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

1-4-S-NS301-2

NS311 Series



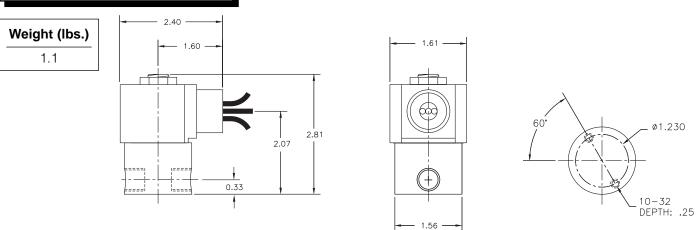
1/4" NPTStainless Steel Body2-Way Direct ActingNormally Closed



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

* Not available for all variations

Dimensions/Weight



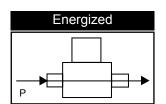
GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 11 1/4-S-NS311-1

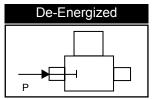
NS311 – 1/4" NPT, Stainless Steel Body, Normally Closed

Valve Selection List

Normally Closed

	_
	700
P	





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

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

Part Numbering

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

Coil Data

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

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

NS302 Series



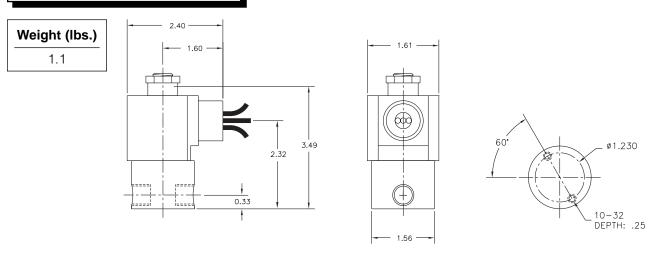
1/4" NPTStainless Steel Body2-Way Direct ActingNormally Open



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

* Not available for all variations

Dimensions/Weight



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

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

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

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

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

NS312 Series



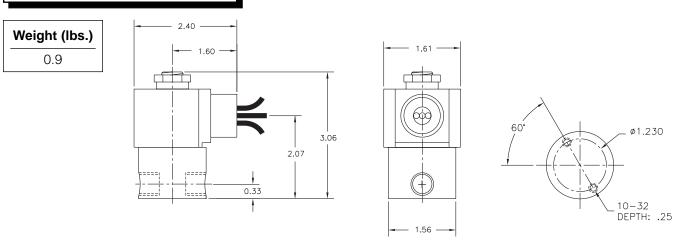
1/4" NPTStainless Steel2-Way Direct ActingNormally Open



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

* Not available for all variations

Dimensions/Weight



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

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

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

Part Numbering

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

Coil Data

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

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



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

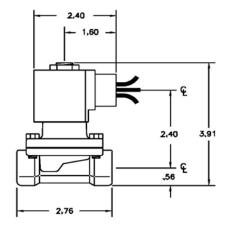


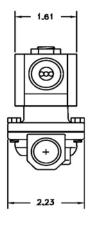
Materials	Seals:		Santoprene/NSF Approved EPDM			
	Orifice:	Pilot	Stainless Steel			
		Main	Stainless Steel			
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit			
	Optional Housir	ngs:	Contact GC Valves Customer Svc. for available			
			options.			
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz.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

* Not available for all variations

Dimensions / Weight





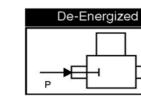


Valve Selection List

Normal	ly	Cl	osed
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		\sim
	Ρ	

Energized
→



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

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

Part Numbering

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

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





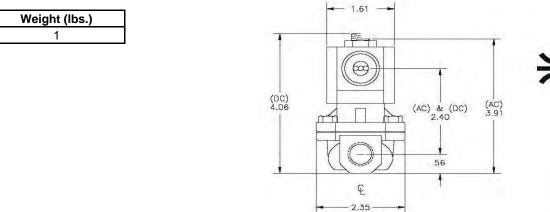
- 3/8" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
 Normally Closed

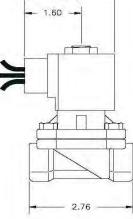


Materials	Seals:		Santoprene/NSF Approved EPDM				
	Orifice:	Pilot	Stainless Steel				
		Main	Noryl				
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit				
	Optional Housir	igs:	Contact GC Valves Customer Svc. for available				
			options.				
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available.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

* Not available for all variations

Dimensions / Weight





2.40

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

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

10

NS201GF02FPCG4

Santo EPR

295

Part Numbering

4.3 0 100 90

3/8"

5/8

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

Coil Data

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





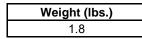
- 3/8" NPT
- 316 SS Body
- 2-Way Piloted Diaphragm Normally Closed

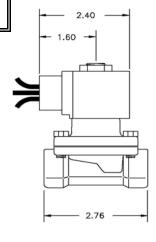


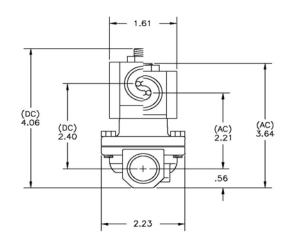
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housir	igs:	Contact GC Valves Customer Svc. for available
			options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available.
			6,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

* Not available for all variations

Dimensions / Weight







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

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

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

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





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

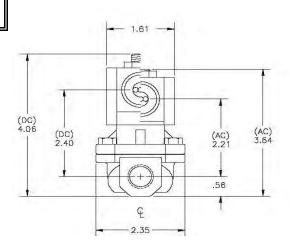


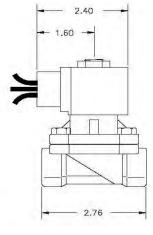
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Noryl
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housir	igs:	Contact GC Valves Customer Svc. for available
			options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available.
			6, 12, 24 VDC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

* Not available for all variations

Dimensions / Weight

Weight (lbs.)	
0.9	





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

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

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

NS301 Series



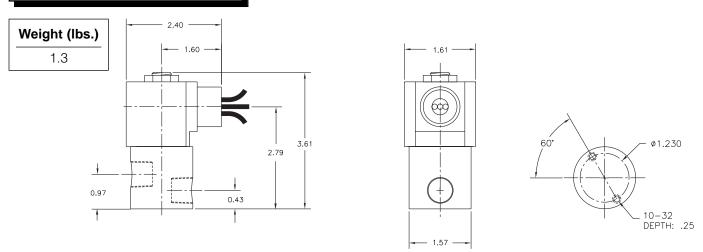
3/8" NPTStainless Steel Body2-Way Direct ActingNormally Closed



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

* Not available for all variations

Dimensions/Weight



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

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

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

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

Coil Data

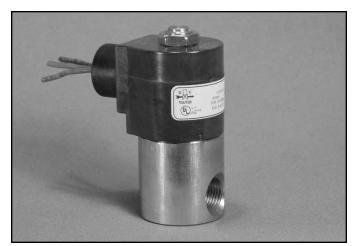
Valve Selection List

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

NS301 Series



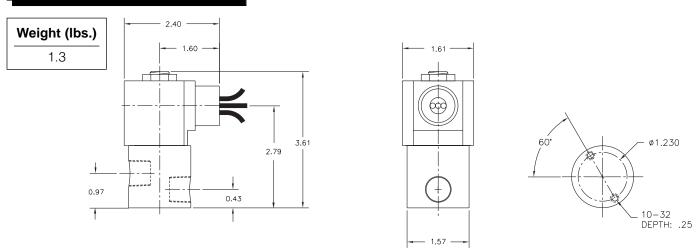
3/8" NPTStainless Steel Body2-Way Direct ActingNormally Closed



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

* Not available for all variations

Dimensions/Weight



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

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

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

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

Coil Data

Valve Selection List

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





- 3/8" NPT

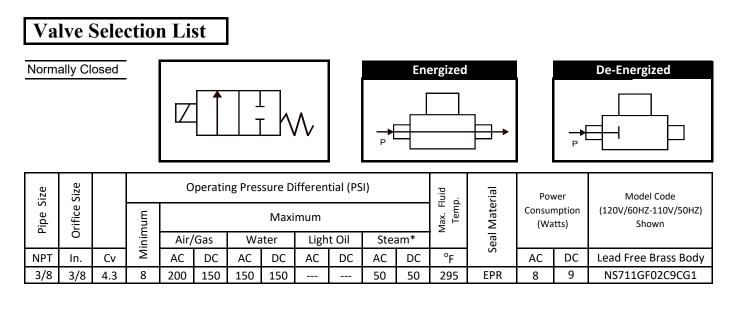
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed



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

3-8-B-NS711-1

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



Part Numbering

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

Coil Data

Coil Family						
Туре	Size					
All	S3					

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

NS202 Series

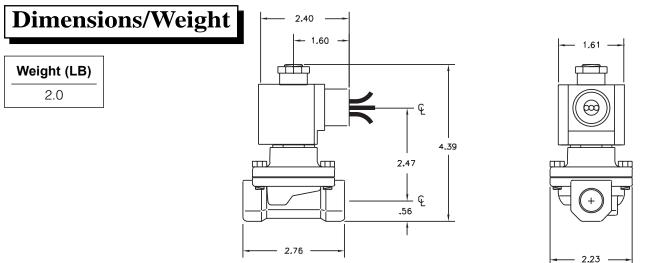


- 3/8" NPT
- Stainless Steel Body Type 316
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open



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

* Not available for all variations



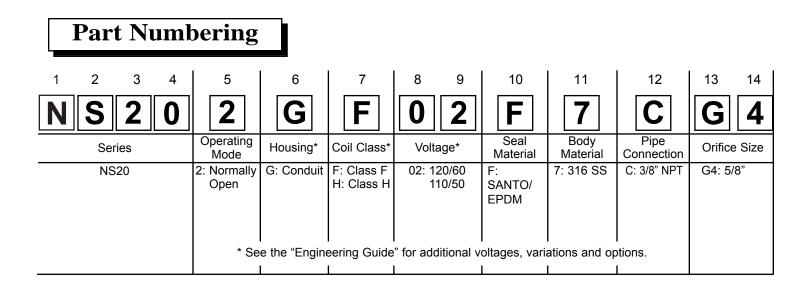
GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 31

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

Valve Selection List

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

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



Coil Data

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

NS202 Series



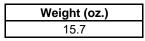
- 3/8" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open

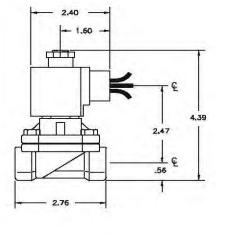


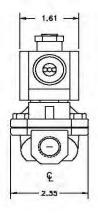
Materials	Seals:		Santoprene/NSF Approved EPDM			
	Orifice:	Pilot	Stainless Steel			
		Main	Nylon 5/8" Diameter			
Electrical	Standard Housir	ıg:	NEAM 4/4X Encapsulated - 1/2" Conduit			
	Optional Housing	gs:	Contact GC Valves Customer Service for available			
			options.			
	Standard Voltag	es:	24,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

* Not available for all variations

Dimensions / Weight







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

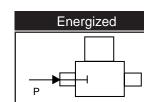
3/8-P-NS202-1

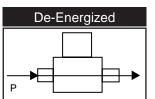
NS202 – 3/8" NPT, Nylon Body, Normally Open

Valve Selection List

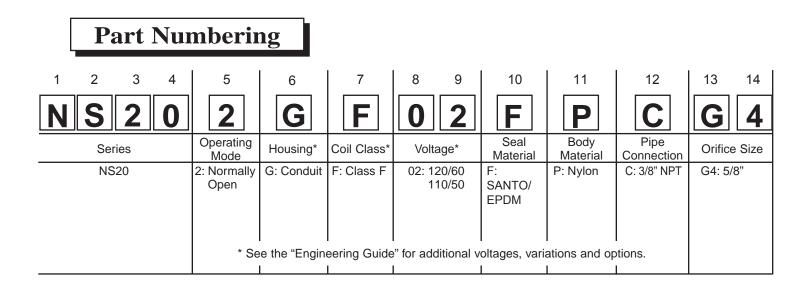
Normally Open

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



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

NS212 Series

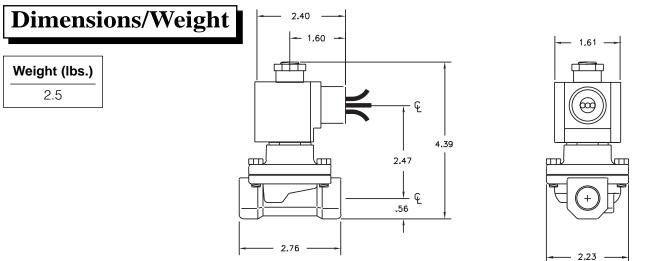


- 3/8" NPT
- Stainless Steel Body Type 316
- 2-Way Piloted Diaphragm
- Normally Open



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

* Not available for all variations



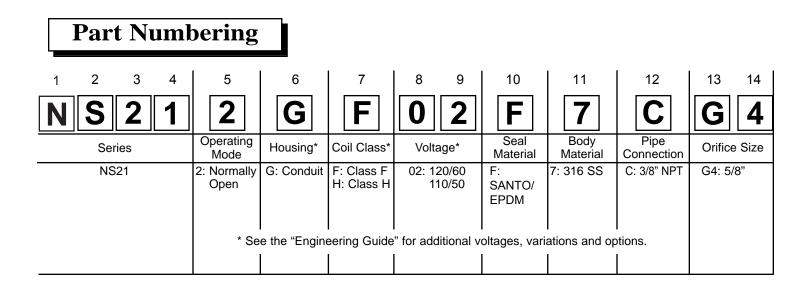
GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 35

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

Valve Selection List

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

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



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

NS212 Series



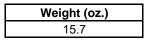
- 3/8" NPT
- Nylon Body
- 2-Way Piloted Diaphragm Normally Open

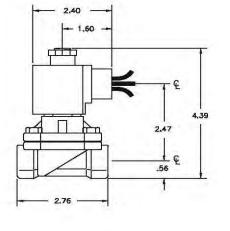


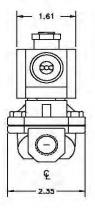
Materials	Seals:		Santoprene/NSF Approved EPDM				
	Orifice:	Pilot	Stainless Steel				
		Main	Nylon 5/8" Diameter				
Electrical	Standard Housing	g:	NEAM 4/4X Encapsulated - 1/2" Conduit				
	Optional Housing	s:	Contact GC Valves Customer Service for available				
			options.				
	Standard Voltage	s: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

* Not available for all variations

Dimensions / Weight







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

3/8-P-NS212-1

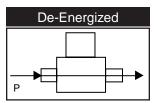
NS212 – 3/8" NPT, Nylon Body, Normally Open

Valve Selection List

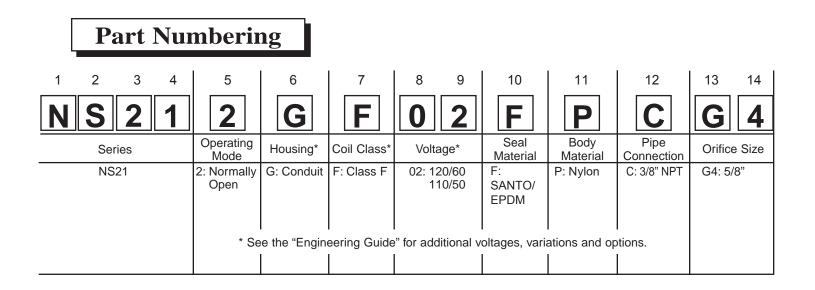
Normally Open

L T		\wedge
	Р	

Energized



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



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





- 3/8" NPT

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

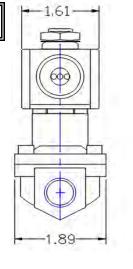


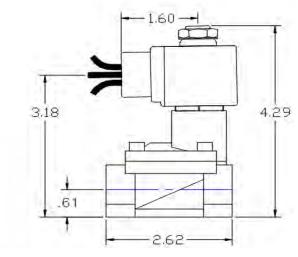
Materials	Seals:	NSF Approved Ethylene Propylene				
	Orifice:	Lead Free Brass				
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)				
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet				
		Open Frame, Junction Box (single or dual knockouts),				
		DIN, Contact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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
2.5	

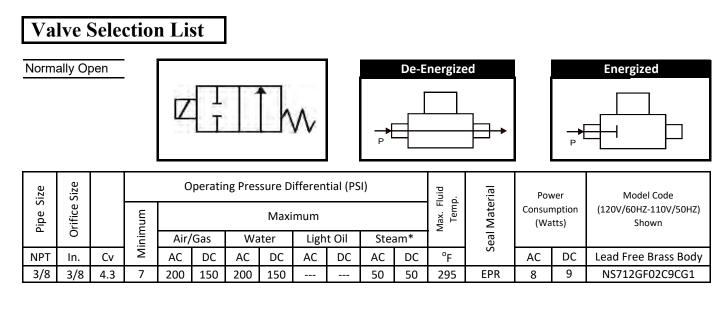




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3-8-B-NS712-1

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



Part Numbering

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

Coil Data

Coil F	amily
Туре	Size
All	S3

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



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

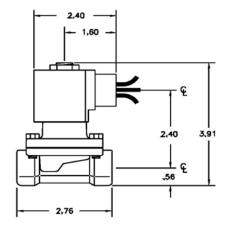


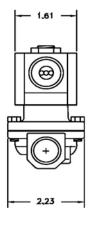
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housi	ngs:	Contact GC Valves Customer Svc. for available
			options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available.
			6,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

* Not available for all variations

Dimensions / Weight





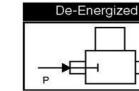


Valve Selection List

Normally Closed

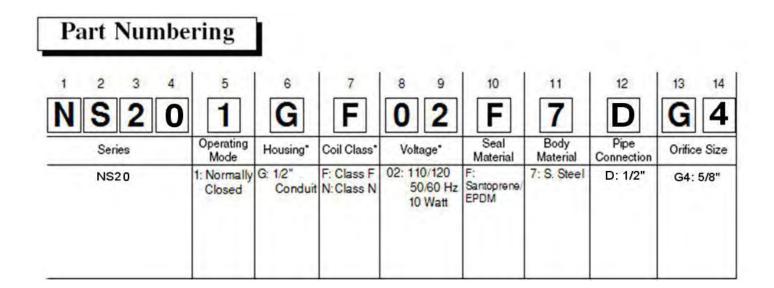
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Energized



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

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



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





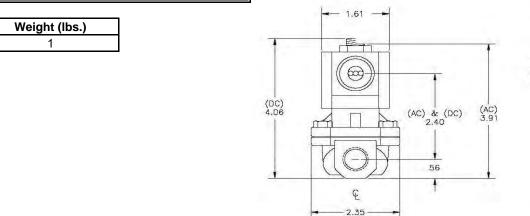
- 1/2" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

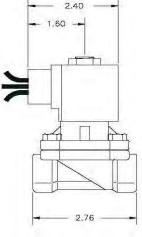


Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Noryl
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housir	ngs:	Contact GC Valves Customer Svc. for available
			options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available.
			6, 12, 24 VDC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

* Not available for all variations

Dimensions / Weight





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

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

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

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



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

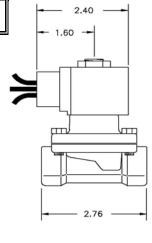


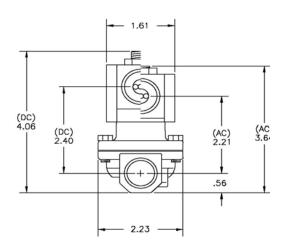
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housi	ngs:	Contact GC Valves Customer Svc. for available options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available.
			6, 12,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

* Not available for all variations

Dimensions / Weight

Weight (lbs.)	
1.8	





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

1

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

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





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

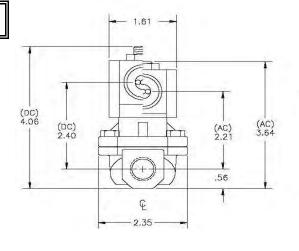


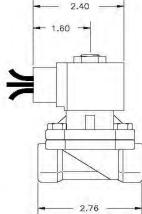
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Noryl
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housi	ngs:	Contact GC Valves Customer Svc. for available
			options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available.
			6, 12, 24 VDC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

* Not available for all variations

Dimensions / Weight

Weight (Ibs.)	
0.9	





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

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

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

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





- 1/2" NPT

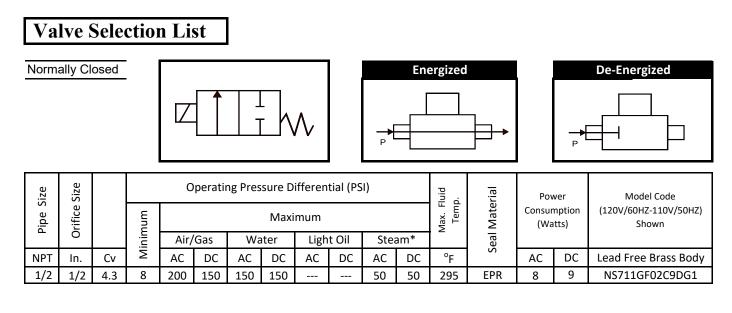
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed



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

1-2-B-NS711-1

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



Part Numbering

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

Coil Family					
Туре	Size				
All	S3				

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

NS202 Series

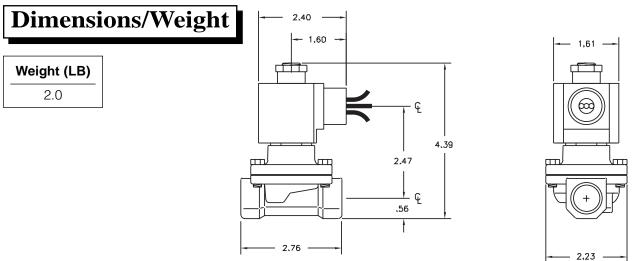


- 1/2" NPT
- Stainless Steel Body Type 316
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open



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

* Not available for all variations

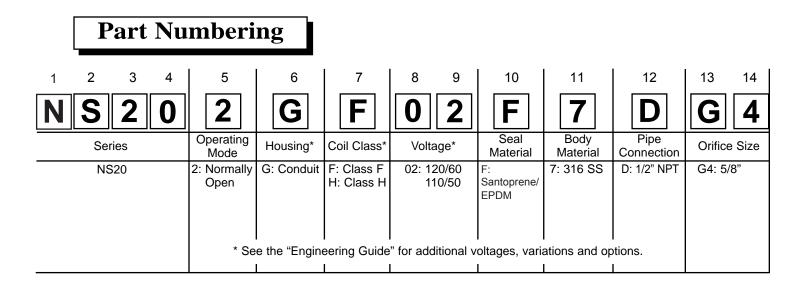


GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 51

Valve Selection List

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

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



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

NS202 Series



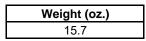
- 1/2" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open

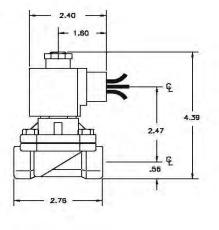


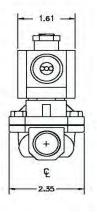
Materials	Seals:		Santoprene/NSF Approved EPDM			
	Orifice:	Pilot	Stainless Steel			
		Main	Nylon 5/8" Diameter			
Electrical	Standard Housi	ng:	NEAM 4/4X Encapsulated - 1/2" Conduit			
	Optional Housin	gs:	Contact GC Valves Customer Service for available			
			options.			
	Standard Voltag	es:	24, 120,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

* Not available for all variations

Dimensions / Weight







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

1/2-P-NS202-1

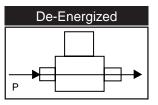
NS202 – 1/2" NPT, Nylon Body, Normally Open

Valve Selection List

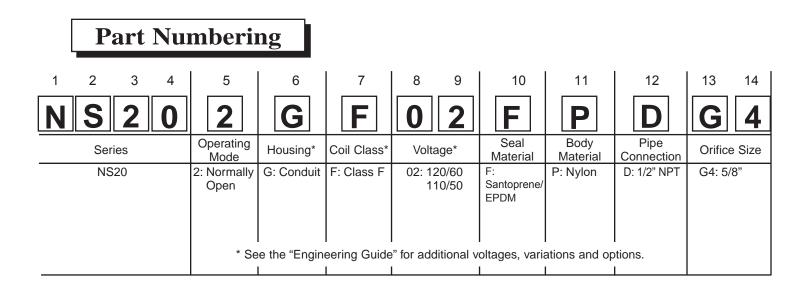
Normally Open

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		Ρ	

Energized



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



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

NS212 Series

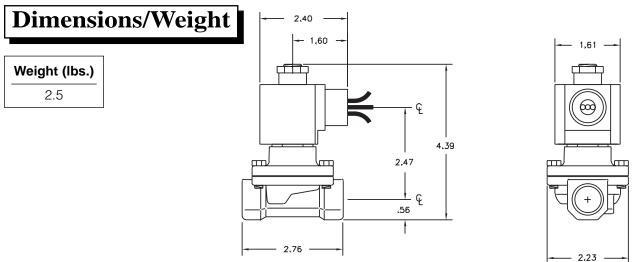


- 1/2" NPT
- Stainless Steel Body Type 316
- 2-Way Piloted Diaphragm
- Normally Open



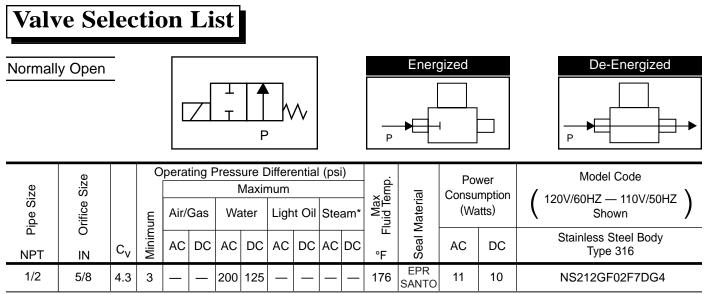
Materials	Seals:	Santoprene/NSF Approved EPDM			
	Orifice: Pilot Main	Stainless Steel Stainless Steel Ø 5/8"			
Electrical	Standard Housing:	NEAM 4/4X Encapsulated - 1/2" Conduit			
	Optional Housings:	Contact GC Valves Customer Service for available options.			
	Standard Voltages:	24, 120, 240 AC 60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

* Not available for all variations

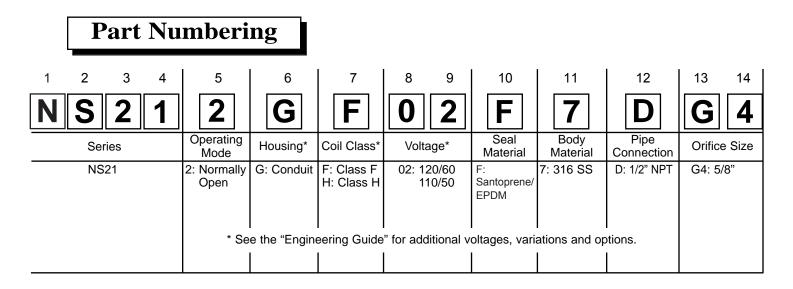


GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 55

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



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



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

NS212 Series



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

Piloted Diaphragm

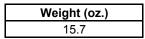
- Normally Open

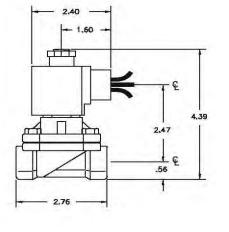


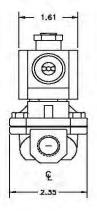
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Nylon 5/8" Diameter
Electrical	Standard Housing	g:	NEAM 4/4X Encapsulated - 1/2" Conduit
	Optional Housing	S:	Contact GC Valves Customer Service for available
			options.
	Standard Voltage	es:	24, 120, 240, AC, 60 and/or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

* Not available for all variations

Dimensions / Weight







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

1/2-P-NS212-1

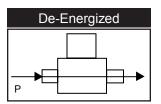
NS212 – 1/2" NPT, Nylon Body, Normally Open

Valve Selection List

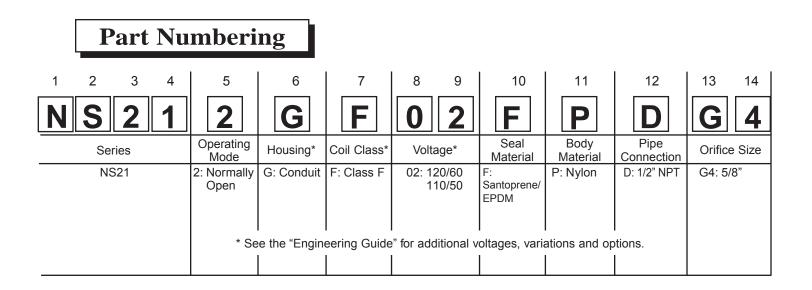
Normally Open

L T		
	P	

Energized



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



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





- 1/2" NPT

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

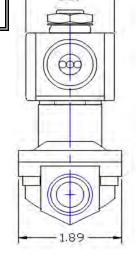


Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Lead Free Brass
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

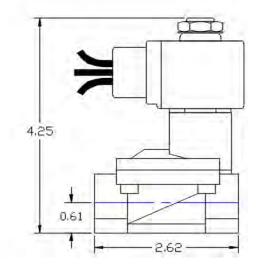
* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
2.5	



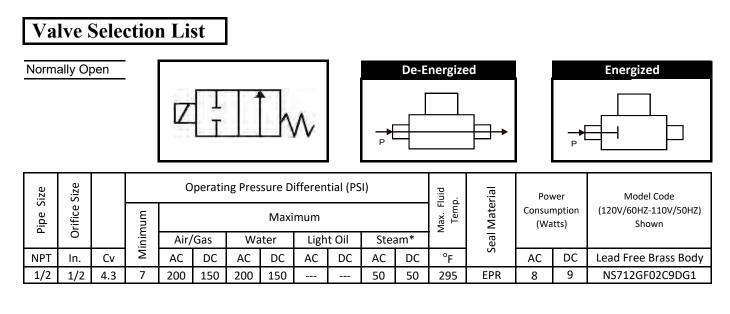
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GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-2-B-NS712-1

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



Part Numbering

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

Coil Data

Coil F	amily
Туре	Size
All	S3

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



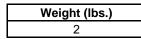
- 3/4" NPT
- 316 SS Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

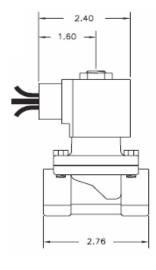


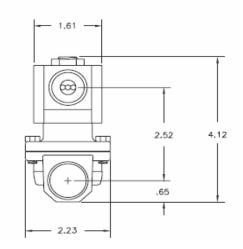
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housir	ngs:	Contact GC Valves Customer Svc. for available
			options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available.
			6,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

* Not available for all variations

Dimensions / Weight







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

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

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





- 3/4" NPT

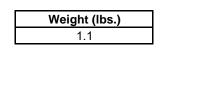
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

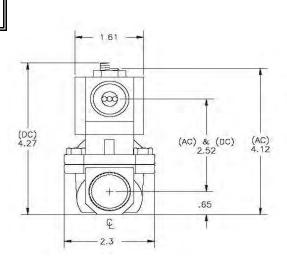


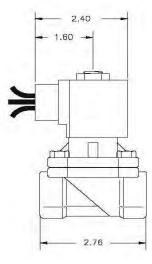
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Noryl
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housir	ngs:	Contact GC Valves Customer Svc. for available
			options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available.
			6, 12, 24 VDC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

* Not available for all variations

Dimensions / Weight





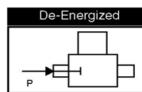


Valve Selection List

Normally Closed

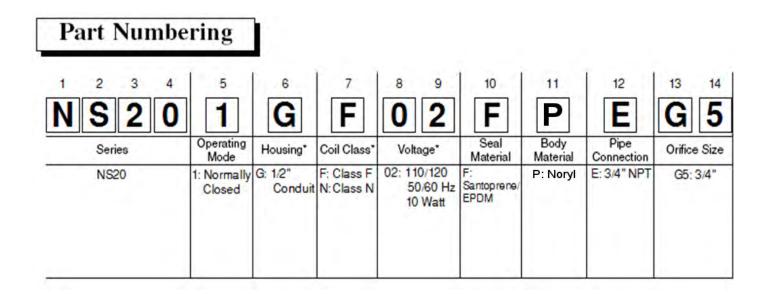
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Size	Size		С	pera	ting F		ure [ximu		entia	l (psi)	emp.	al	Pov	wer mption	Model Code (120V/60HZ — 110V/50HZ)
Pipe SI	Orifice		unu	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Max Iuid Temp.	Material	(Wa		(Shown)
NPT	IN	cv	Minim	AC	DC	AC	DC	AC	DC	AC	°F	Seal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

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



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



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

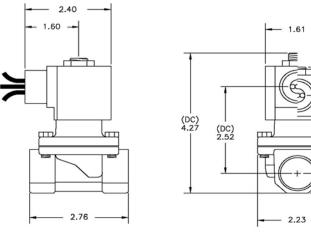


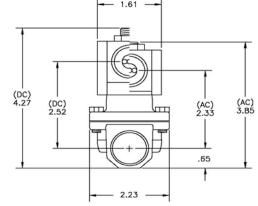
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housi	ngs:	Contact GC Valves Customer Svc. for available
			options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available.
			6,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

* Not available for all variations

Dimensions / Weight

Weight (lbs.)	
1.9	





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

ons

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

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

NS211 Series

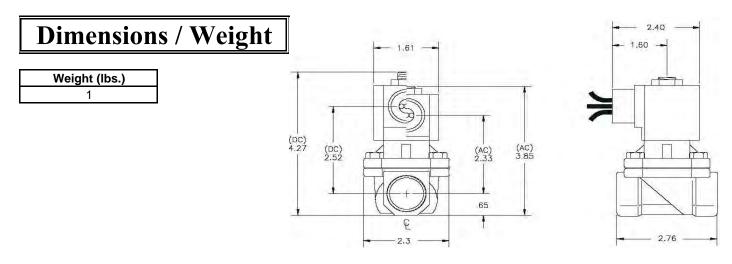


- 3/4" NPT
- Nylon Body
- 2-Way
 Piloted Diaphragm
 Normally Closed



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

* Not available for all variations



Valve Selection List

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

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

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



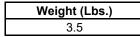


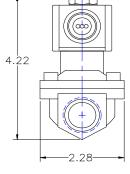
- 3/4" NPT

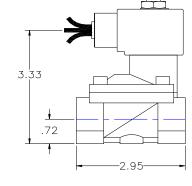
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed



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



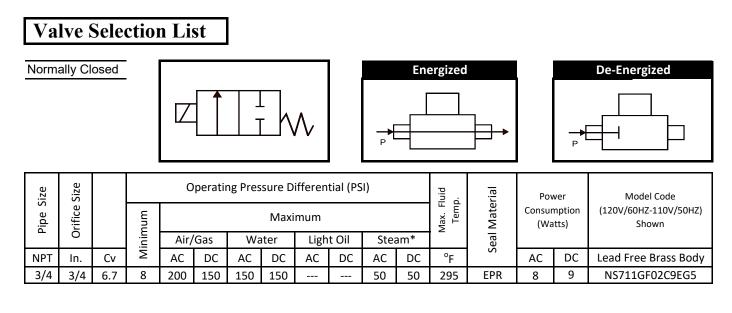




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3-4-B-NS711-1

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



Part Numbering

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

Coil F	amily
Туре	Size
All	S3

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





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

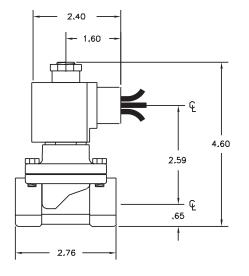


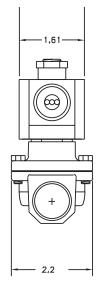
Materials	Seals:		Santoprene/NSF Approved EPDM					
	Orifice:	Pilot	Stainless Steel					
		Main	Stainless Steel					
Electrical	Housing:		NEAM 4/4X Encapsulated - 1/2" Conduit					
	Optional Housing	S:	Contact GC Valves Customer Svc. for available					
			options.					
	Voltage:		120 VAC 50/60 Hz			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

* Not available for all variations

Dimensions / Weight

Weight (lbs.)
2.2





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

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

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

Coil Data

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

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

NS202 Series



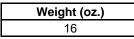
- 3/4" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open

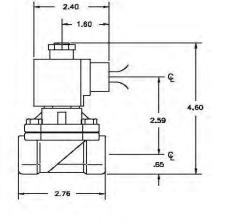


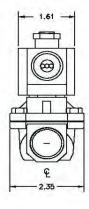
Materials	Seals:		Santoprene/NSF Approved EPDM				
	Orifice:	Pilot	Stainless Steel				
		Main	Nylon 3/4" Diameter				
Electrical	Standard Housir	ng:	NEAM 4/4X Encapsulated - 1/2" Conduit				
	Optional Housin	gs:	Contact GC Valves Customer Service for				
			available options.				
	Standard Voltag	es: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

* Not available for all variations

Dimensions / Weight







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

3/4-P-NS202-1

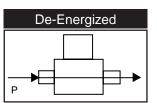
NS202 – 3/4" NPT, Nylon Body, Normally Open

Valve Selection List

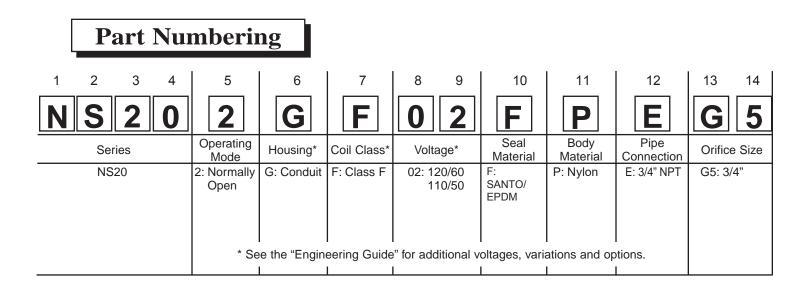
Normally Open

L		7
Т	P	<u>_</u>

Energized



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



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

NS212 Series

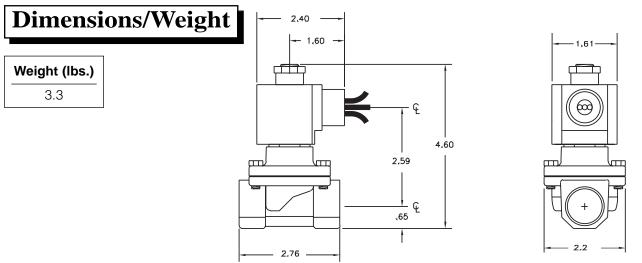


- 3/4" NPT
- Stainless Steel Body **Type 316**
- 2-Way Piloted Diaphragm
- Normally Open

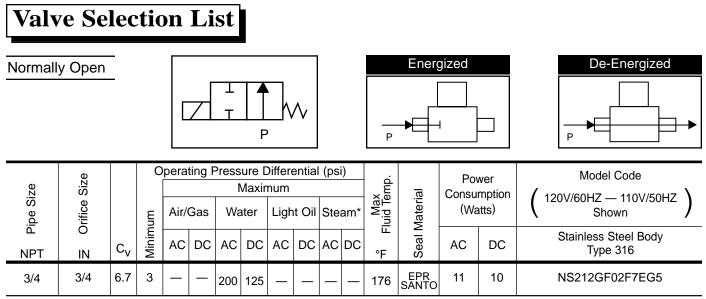


Seals:	Santoprene/NSF Approved EPDM				
Orifice: Pilot	Stainless Steel				
Main	Stainless Steel Ø 3/4"				
Standard Housing:	NEAM 4/4X Encapsulated - 1/2" Conduit				
Optional Housings:	Contact GC Valves Customer Service for available options.				
Standard Voltages:	24, 120, 240 AC 60 Hz; 50 Hz available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

* Not available for all variations



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



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

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

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

NS212 Series



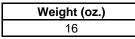
- 3/4" NPT
- Nylon Body
- 2-Way Piloted Diaphragm
- Normally Open

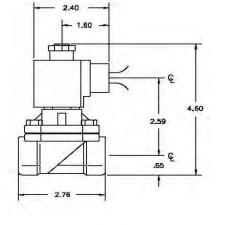


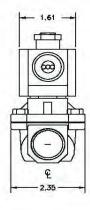
Materials	Seals:		Santoprene/NSF Approved EPDM				
	Orifice:	Pilot	Stainless Steel				
		Main	Nylon 3/4" Diameter				
Electrical	Standard Housin	g:	NEAM 4/4X Encapsulated - 1/2" Conduit				
	Optional Housing	js:	Contact GC Valves Customer Service for				
			available options.				
	Standard Voltage	es: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

* Not available for all variations

Dimensions / Weight



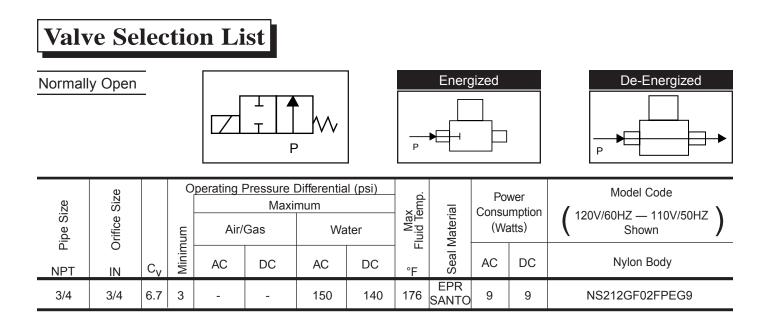


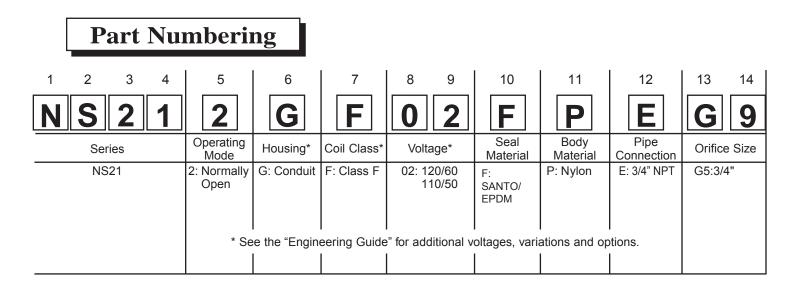


GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3/4-P-NS212-1

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





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

NS202 Series



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

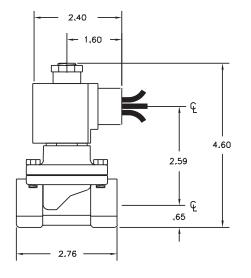


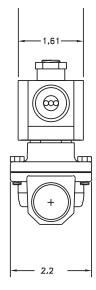
Materials	Seals:		Santoprene/NSF Approved EPDM				
	Orifice:	Pilot	Stainless Steel				
		Main	Stainless Steel				
Electrical	Housing:		NEAM 4/4X Encapsulated - 1/2" Conduit				
	Optional Housings:		Contact GC Valves Customer Svc. for available				
			options.				
	Voltage:		120 VAC 50/60 Hz				
			Contact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

* Not available for all variations

Dimensions / Weight

Weight (lbs.)	
2.2	





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

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

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

Coil Data

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

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

NS212 Series

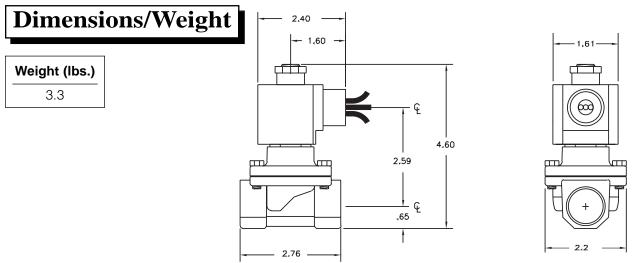


- 3/4" NPT
- Stainless Steel Body **Type 316**
- 2-Way Piloted Diaphragm
- Normally Open



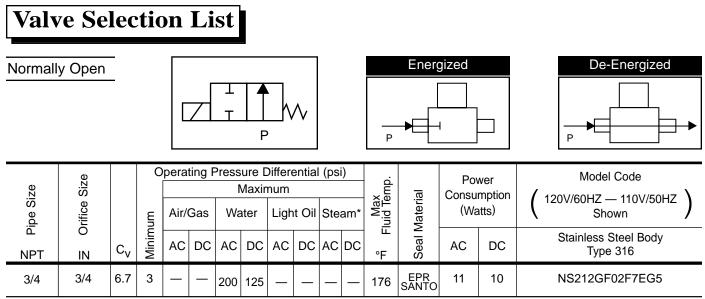
Seals:		Santoprene/NSF Approved EPDM				
Orifice:	Pilot Main	Stainless Steel Stainless Steel Ø 3/4"				
Standard Ho	using:	NEAM 4/4X Encapsulated - 1/2" Conduit				
Optional Hou	isings:	Contact GC Valves Customer Service for available options.				
Standard Vol	tages:	24, 120, 240 AC 60 Hz; 50 Hz available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

* Not available for all variations



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

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



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

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

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

NS202 Series



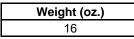
- 3/4" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open

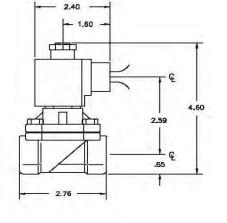


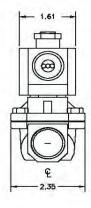
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
	Main		Nylon 3/4" Diameter
Electrical	Standard Housin	g:	NEAM 4/4X Encapsulated - 1/2" Conduit
	Optional Housing	js:	Contact GC Valves Customer Service for
			available options.
	Standard Voltage	es:	24, 120, 240, AC, 60 and/or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

* Not available for all variations

Dimensions / Weight







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

3/4-P-NS202-1

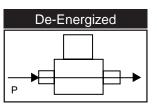
NS202 – 3/4" NPT, Nylon Body, Normally Open

Valve Selection List

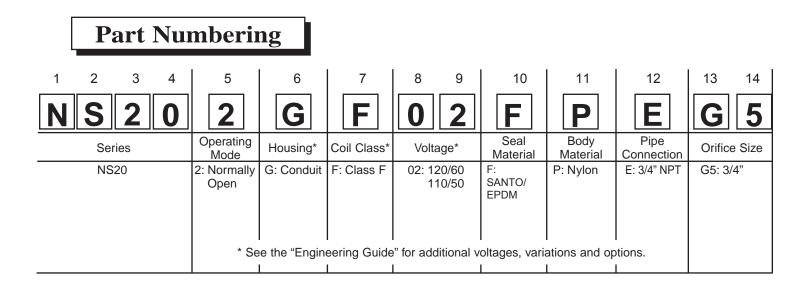
Normally Open

T		7
Т		
	Ρ	

Energized



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



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

NS212 Series



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

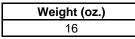
Piloted Diaphragm - Normally Open

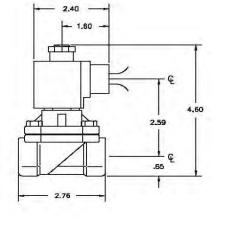


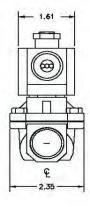
Materials	Seals:		Santoprene/NSF Approved EPDM	
	Orifice:	Pilot	Stainless Steel	
	Main		Nylon 3/4" Diameter	
Electrical	Standard Housir	ng:	NEAM 4/4X Encapsulated - 1/2" Conduit	
	Optional Housin	gs:	Contact GC Valves Customer Service for	
			available options.	
	Standard Voltag	es:	24, 120, 240, AC,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

* Not available for all variations

Dimensions / Weight



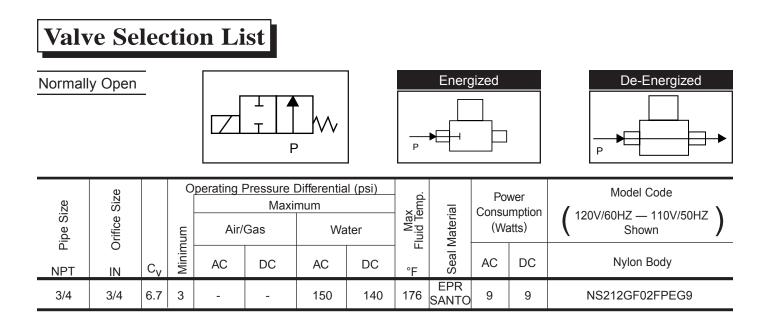


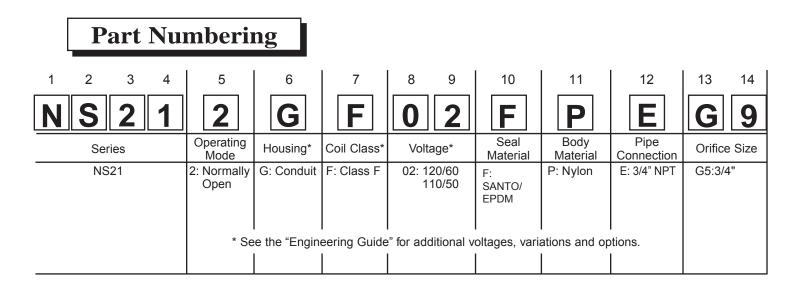


GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3/4-P-NS212-1

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





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





- 3/4" NPT

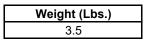
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Open

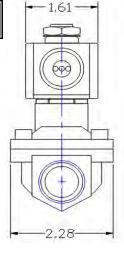


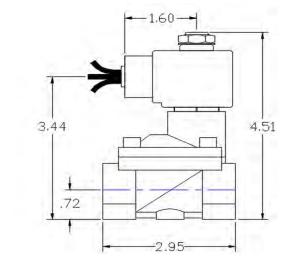
Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Lead Free Brass
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight



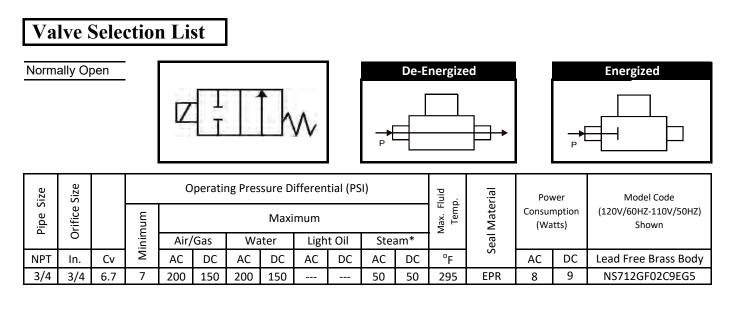




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3-4-B-NS712-1

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



Part Numbering

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

Coil Data

Coil Family					
Туре	Size				
All	S3				

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

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

NS20 Series



- 1" NPT

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

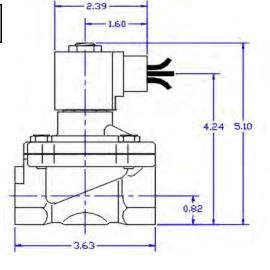


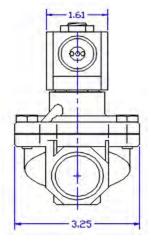
Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Stainless Steel
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
4.0	





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

1-S-NS201-1

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

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

Part Numbering

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

Coil Family				
Type Size				
All S4				

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

NS20 Series



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

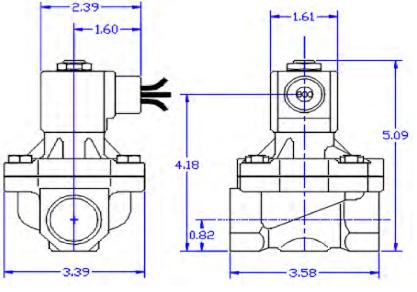


Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Nylon
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer Svc. For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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
3.8	



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

1-P-NS201-1

NS201 - 1" NPT, Nylon Body, Normally Closed

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

Part Numbering

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

Coil Family				
Type Size				
All	S4			

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

NS21 Series



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

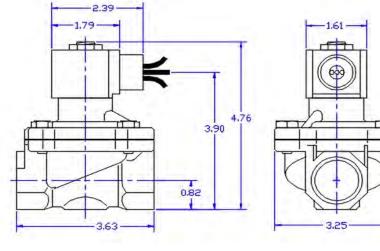


Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Stainless Steel
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
3.9	



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

1-S-NS211-1

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

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

Part Numbering

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

Coil Family					
Туре	Size				
All	S3				

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





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

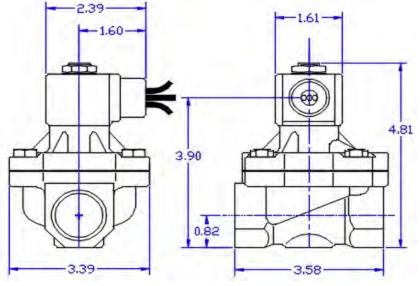


Materials	Seals:	NSF Approved Ethylene Propylene				
	Orifice:	Nylon				
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)				
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet				
		Open Frame, Junction Box (single or dual knockouts),				
		DIN, Contact GC Valves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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)
1.7



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

1-P-NS211-1

NS211 - 1" NPT, Nylon Body, Normally Closed

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

Part Numbering

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

Coil Family						
Туре	Size					
All	S3					

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

NS21 Series



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

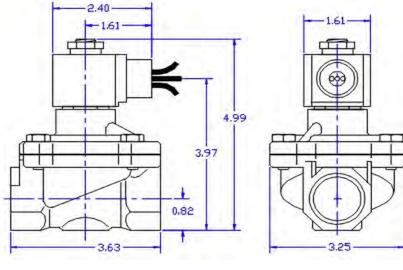


eals:)rifice: tandard Housing:	NSF Approved Ethylene Propylene Stainless Steel				
	Stainless Steel				
tandard Housing:					
lanuaru nousiny.	Encapsulated Waterproof Conduit (NEMA 4X)				
ptional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet				
	Open Frame, Junction Box (single or dual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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
3.9	



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

1-S-NS212-1

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

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

Part Numbering

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

Coil Family						
Туре	Size					
All	S3					

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

NS21 Series



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

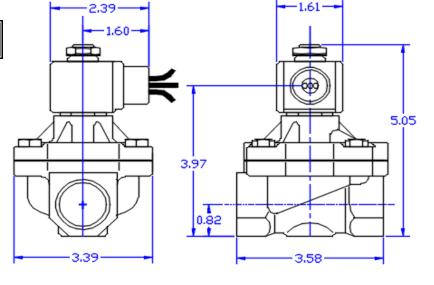


Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Nylon
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer Svc. For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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
1.7	



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

1-P-NS212-1

NS212 - 1" NPT, Nylon Body, Normally Open

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

Part Numbering

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

Coil Family						
Туре	Size					
All	S3					

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





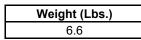
- 1" NPT
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed

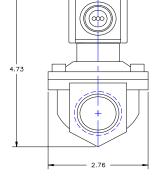


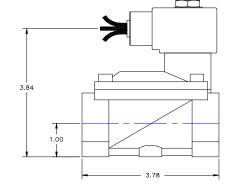
Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Lead Free Brass
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight

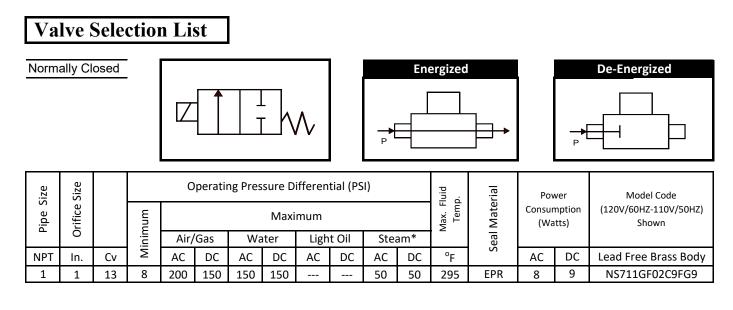






GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

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



Part Numbering

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

Coil Family						
Туре	Size					
All	S3					

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

NS71 Series

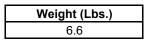


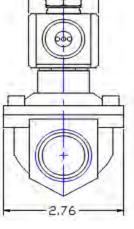
- 1" NPT
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Open

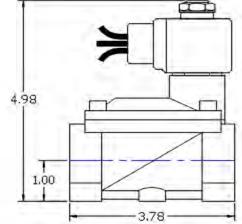


Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Lead Free Brass
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

Dimensions / Weight







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

1-B-NS712-1

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

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

Part Numbering

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

Coil Data

Coil Family		
Туре	Size	
All	S3	

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

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

NS20 Series



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

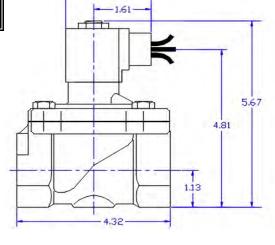


Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Stainless Steel
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

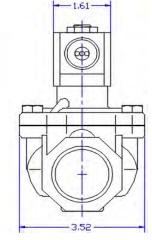
* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
6.2	



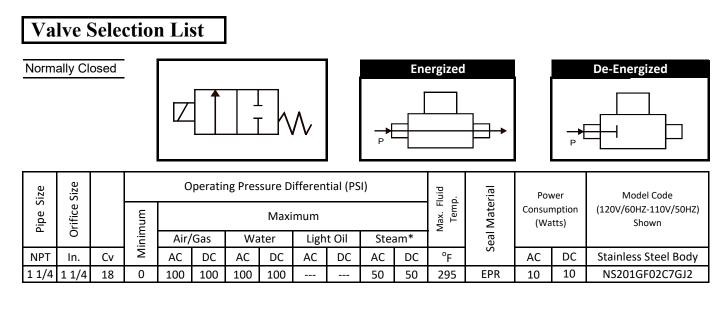
2.40



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

1.25-S-NS201-1

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



Part Numbering

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

Coil Family				
Type Size				
All S4				

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





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

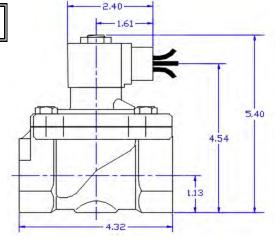


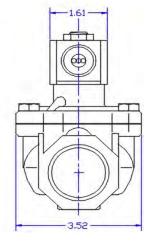
Materials	Seals:	NSF Approved Ethylene Propylene	
	Orifice:	Stainless Steel	
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)	
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet	
		Open Frame, Junction Box (single or dual knockouts),	
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
6.1	

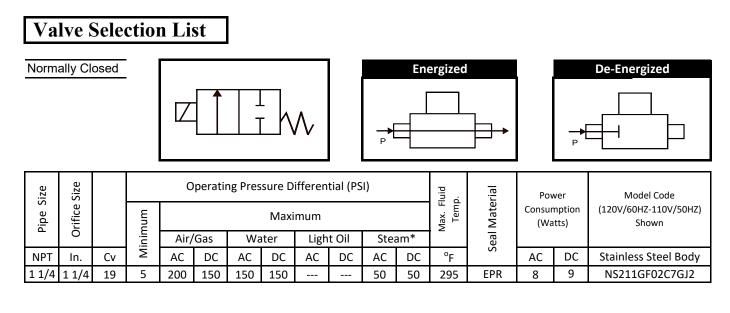




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1.25-S-NS211-1

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



Part Numbering

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

Coil Family				
Type Size				
All S3				

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

NS21 Series



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

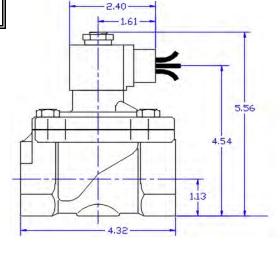


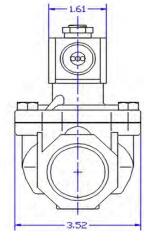
Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Stainless Steel
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
6.1	

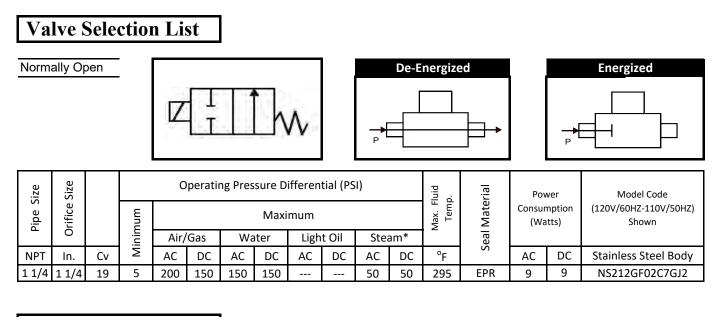




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1.25-S-NS212-1

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



Part Numbering

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

Coil Family						
Туре	Size					
All	S3					

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





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

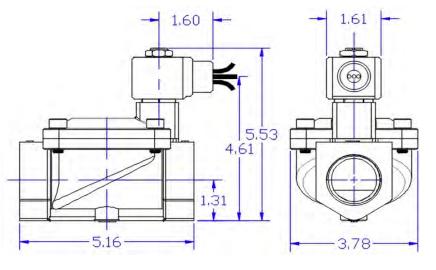


Materials	Seals:	NSF Approved Ethylene Propylene					
	Orifice:	Lead Free Brass					
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)					
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet					
		Open Frame, Junction Box (single or dual knockouts),					
		DIN,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

* Not available for all variations

Dimensions / Weight

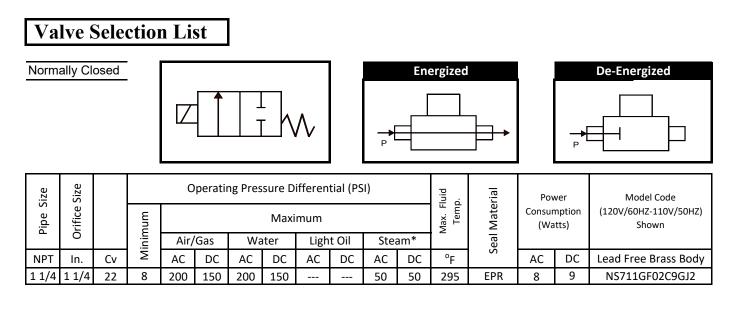
Weight (Lbs.)
6.2



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

1-1-4-B-NS711-1

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



Part Numbering

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

Coil Family						
Туре	Size					
All	S3					

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

NS71 Series



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

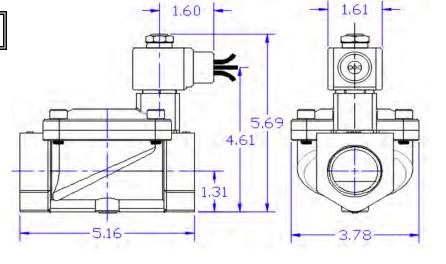


Materials	Seals:	NSF Approved Ethylene Propylene				
	Orifice:	Lead Free Brass				
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)				
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet				
		Open Frame, Junction Box (single or dual knockouts),				
		DIN, Contact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

* Not available for all variations

Dimensions / Weight

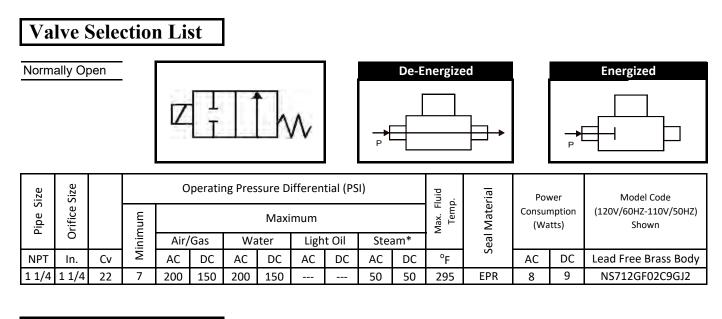
Weight (Lbs.)	
6.2	



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

1-1-4-B-NS712-1

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



Part Numbering

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

Coil Data

Coil Family						
Туре	Size					
All	S3					

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

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

NS20 Series



- 1 1/2" NPT

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

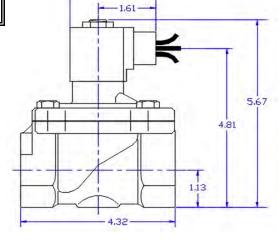


Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Stainless Steel
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

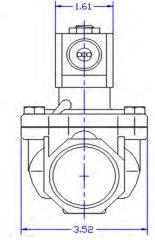
* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
6.1	



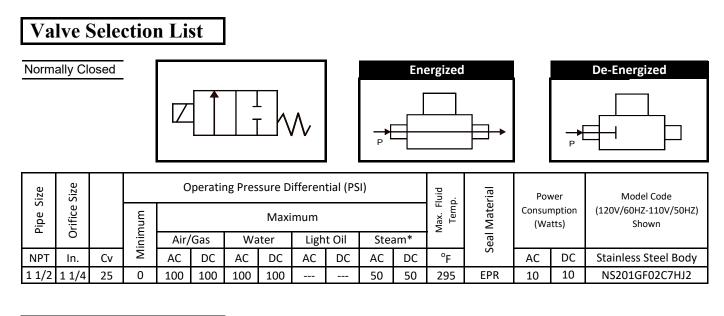
2.40



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

1.5-S-NS201-1

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



Part Numbering

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

Coil Family			
Type Size			
All	S4		

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

NS21 Series



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

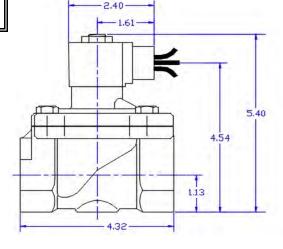


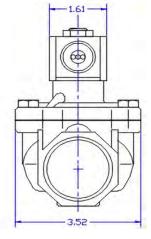
Materials	Seals:	NSF Approved Ethylene Propylene		
	Orifice:	Stainless Steel		
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)		
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet		
		Open Frame, Junction Box (single or dual knockouts),		
		DIN, Contact GC Valves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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
6.0	

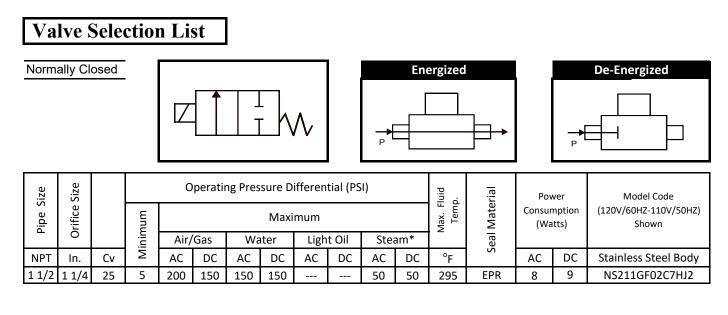




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1.5-S-NS211-1

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



Part Numbering

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

Coil Family			
Type Size			
All	S3		

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

NS21 Series



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

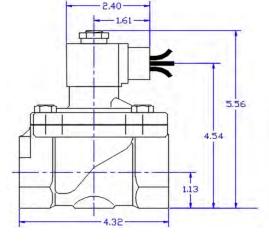


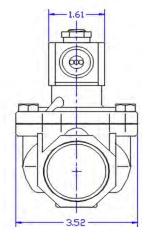
Materials	Seals:	NSF Approved Ethylene Propylene	
	Orifice:	Stainless Steel	
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)	
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet	
		Open Frame, Junction Box (single or dual knockouts),	
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
6.0	

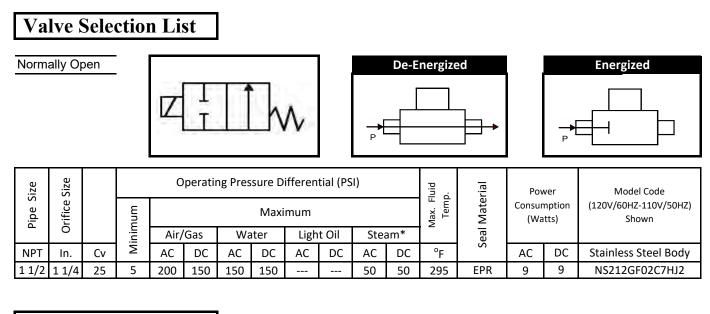




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1.5-S-NS212-1

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



Part Numbering

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

Coil Family						
Туре	Size					
All	S3					

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





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

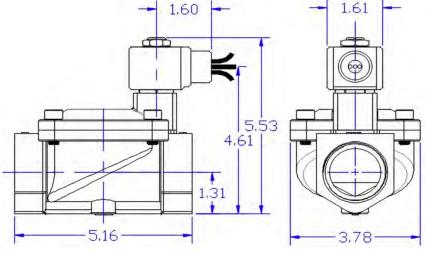


Materials	Seals:	NSF Approved Ethylene Propylene				
	Orifice:	Lead Free Brass				
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)				
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet				
		Open Frame, Junction Box (single or dual knockouts),				
		DIN, Contact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

* Not available for all variations

Dimensions / Weight

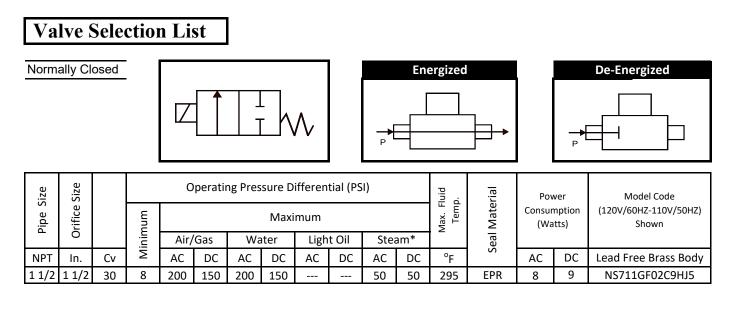
Weight (Lbs.)
6



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

1-1-2-B-NS711-1

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



Part Numbering

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

Coil Family						
Туре	Size					
All	S3					

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

NS71 Series



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

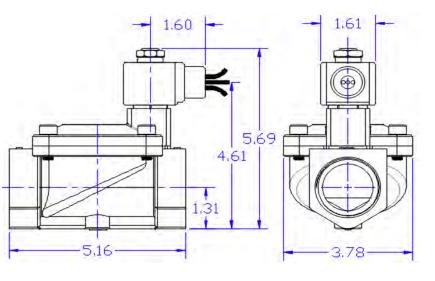


Materials	Seals:	NSF Approved Ethylene Propylene
iviale riais		
	Orifice:	Lead Free Brass
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC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

* Not available for all variations

Dimensions / Weight

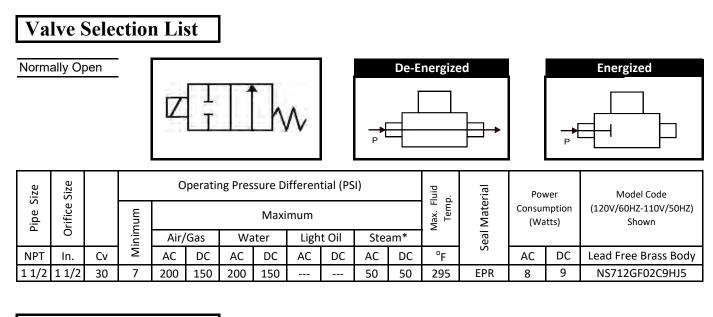
Weight (Lbs.)	
6	



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

1-1-2-B-NS712-1

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



Part Numbering

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

Coil Data

Coil Family					
Type Size					
All	S3				

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

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

NS21 Series



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

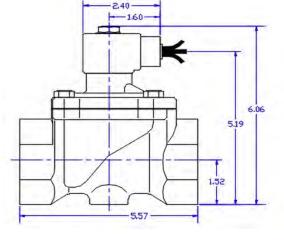


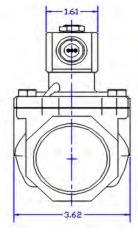
Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Stainless Steel
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
9.0	

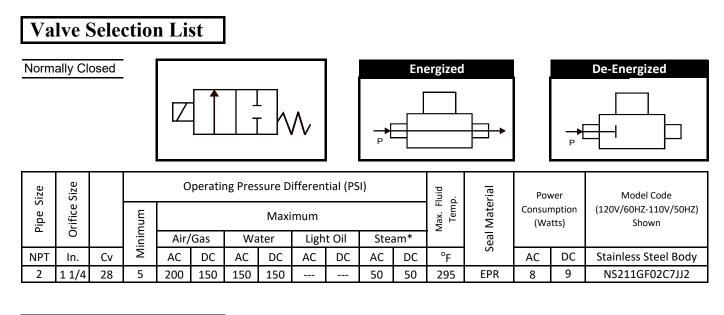




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

2-S-NS211-1

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



Part Numbering

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

Coil Family					
Type Size					
All	S3				

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

NS21 Series



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

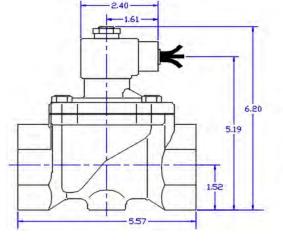


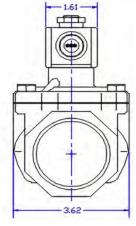
Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Stainless Steel
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
9.0	





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

2-S-NS212-1

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

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

Part Numbering

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

Coil Family					
Type Size					
All	S3				

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





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

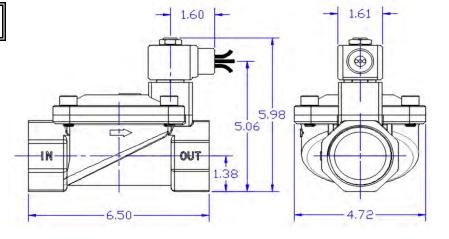


Materials	Seals:	NSF Approved Ethylene Propylene		
	Orifice:	Lead Free Brass		
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)		
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet		
		Open Frame, Junction Box (single or dual knockouts),		
		DIN, Contact GC Valves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

* Not available for all variations

Dimensions / Weight

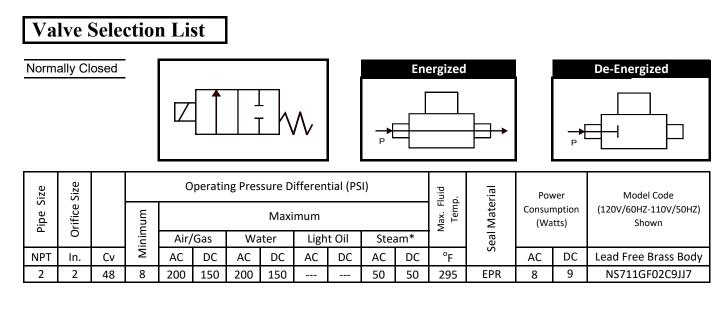
Weight (Lbs.)	
8.8	



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

2-B-NS711-1

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



Part Numbering

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

Coil Family			
Type Size			
All	S3		

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





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

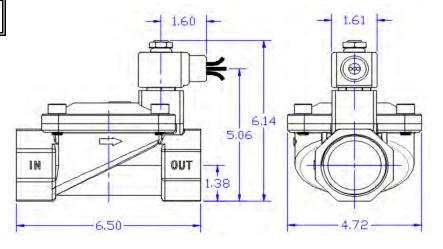


Materials	Seals:	NSF Approved Ethylene Propylene
	Orifice:	Lead Free Brass
Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
	Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
		Open Frame, Junction Box (single or dual knockouts),
		DIN, Contact GC Valves Customer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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
8.8	



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

2-B-NS712-1

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

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

Part Numbering

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

Coil Data

Coil Family			
Type Size			
All	S3		

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

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

NS201(AC) -- Service and Installation --

DESCRIPTION

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

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

OPERATION

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

SPECIFICATIONS

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

OPERATING TEMPERATURES

Ambient 32 ° - 125° F	Fluid	32° - 295° F
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For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

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

MAINTENANCE

COIL REPLACEMENT

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

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

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

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

PARTS

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

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

REBUILD KIT

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

REPAIR KIT

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

REBUILD & REPAIR KIT CHART

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

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

Cleaning

Cleaning fluid must be compatible with all valve components.

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

SERVICE Disassembly

WARNING

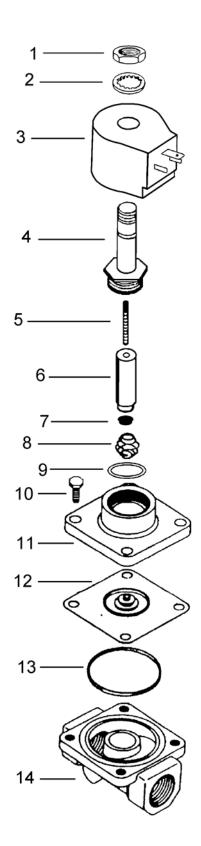
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

TROUBLE-SHOOTING

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

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



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NS201(DC) -- Service and Installation --

DESCRIPTION

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

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

OPERATION

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

SPECIFICATIONS

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

OPERATING TEMPERATURES

Ambient 32 ° - 125° F	Fluid	32° - 295° F
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For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

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

MAINTENANCE

COIL REPLACEMENT

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

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

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

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

PARTS

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

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

REBUILD KIT

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

REPAIR KIT

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

REBUILD & REPAIR KIT CHART

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

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

#### Cleaning

### Cleaning fluid must be compatible with all valve components.

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

SERVICE Disassembly

#### WARNING

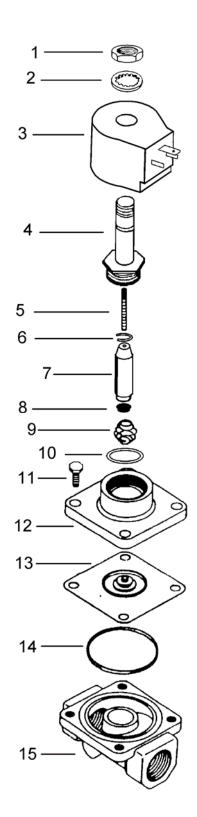
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

#### TROUBLE-SHOOTING

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

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



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

#### DESCRIPTION

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

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

#### OPERATION

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

#### SPECIFICATIONS

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

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

For other applications, consult the factory.

#### INSTALLATION

Check valve specifications to make sure of proper application.

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

#### MAINTENANCE

#### COIL REPLACEMENT

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

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

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

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

#### PARTS

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

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

**REBUILD KIT** 

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

#### **REPAIR KIT**

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

#### **REBUILD & REPAIR KIT CHART**

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

#### **COIL CHART**

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

#### Cleaning

### Cleaning fluid must be compatible with all valve components.

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

SERVICE Disassembly

#### WARNING

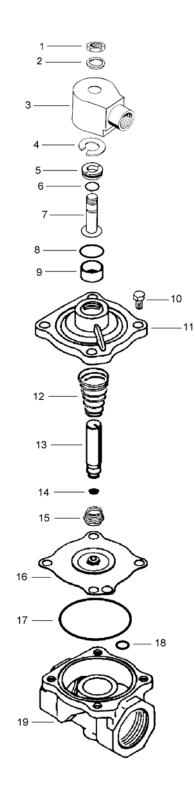
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

#### TROUBLE-SHOOTING

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

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



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

### DESCRIPTION

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

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

#### OPERATION

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

#### SPECIFICATIONS

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

**OPERATING TEMPERATURES** 

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

For other applications, consult the factory.

#### INSTALLATION

Check valve specifications to make sure of proper application.

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

#### MAINTENANCE

#### COIL REPLACEMENT

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

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

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

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

#### PARTS

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

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

#### **REBUILD KIT**

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

#### **REPAIR KIT**

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

#### **REBUILD & REPAIR KIT CHART**

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

#### **COIL CHART**

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

#### Cleaning

### Cleaning fluid must be compatible with all valve components.

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

SERVICE Disassembly

#### WARNING

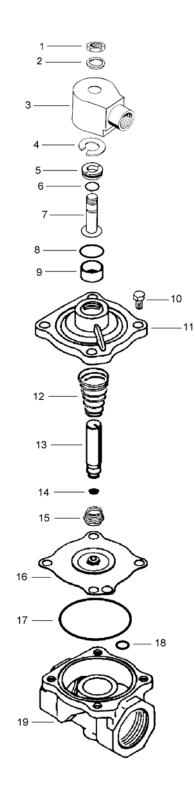
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

#### TROUBLE-SHOOTING

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

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



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## NS211(AC) -- Service and Installation --

### DESCRIPTION

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

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

### OPERATION

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

### SPECIFICATIONS

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

### **OPERATING TEMPERATURES**

Ambient 32 ° - 125° F	Fluid	32° - 295° F
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For other applications, consult the factory.

### INSTALLATION

Check valve specifications to make sure of proper application.

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

### MAINTENANCE

### COIL REPLACEMENT

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

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

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

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

#### PARTS

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

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

### **REBUILD KIT**

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

### **REPAIR KIT**

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

### **REBUILD & REPAIR KIT CHART**

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

### **COIL CHART**

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

Cleaning

## Cleaning fluid must be compatible with all valve components.

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

### WARNING

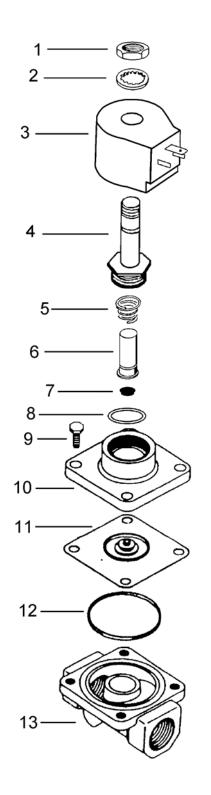
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

### TROUBLE-SHOOTING

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

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



## NS211(DC) -- Service and Installation --

### DESCRIPTION

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

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

### OPERATION

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

### SPECIFICATIONS

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

### **OPERATING TEMPERATURES**

Ambient 32 ° - 125° F	Fluid	32° - 295° F
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For other applications, consult the factory.

### INSTALLATION

Check valve specifications to make sure of proper application.

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

### MAINTENANCE

### COIL REPLACEMENT

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

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

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

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

#### PARTS

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

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

### **REBUILD KIT**

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

### **REPAIR KIT**

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

### **REBUILD & REPAIR KIT CHART**

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

### **COIL CHART**

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

### Cleaning

### Cleaning fluid must be compatible with all valve components.

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

### WARNING

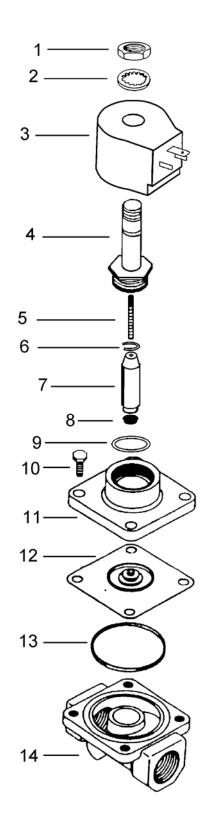
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

### **TROUBLE-SHOOTING**

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

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



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

### DESCRIPTION

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

Valves should be mounted with the operator in a vertical position

### OPERATION

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

### SPECIFICATIONS

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

### **OPERATING TEMPERATURES**

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

For other applications, consult the factory.

### INSTALLATION

Check valve specifications to make sure of proper application.

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

### MAINTENANCE

### COIL REPLACEMENT

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

Incorrect coil reassembly can cause coil burnout.

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

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

### PARTS

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

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

### **REBUILD KIT**

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

### **REPAIR KIT**

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

### **REBUILD & REPAIR KIT CHART**

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

### **COIL CHART**

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

### Cleaning

### Cleaning fluid must be compatible with all valve components.

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

### WARNING

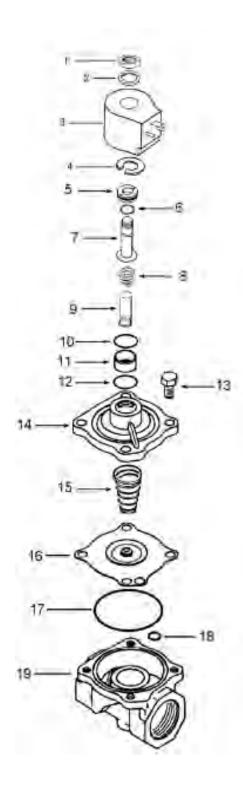
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

### **TROUBLE-SHOOTING**

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

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



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

### DESCRIPTION

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

Valves should be mounted with the operator in a vertical position

### OPERATION

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

### SPECIFICATIONS

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

### **OPERATING TEMPERATURES**

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

For other applications, consult the factory.

#### INSTALLATION

Check valve specifications to make sure of proper application.

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

### MAINTENANCE

### COIL REPLACEMENT

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

Incorrect coil reassembly can cause coil burnout.

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

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

#### PARTS

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

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

### **REBUILD KIT**

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

### **REPAIR KIT**

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

### **REBUILD & REPAIR KIT CHART**

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

### COIL CHART

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

### Cleaning

### Cleaning fluid must be compatible with all valve components.

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

### WARNING

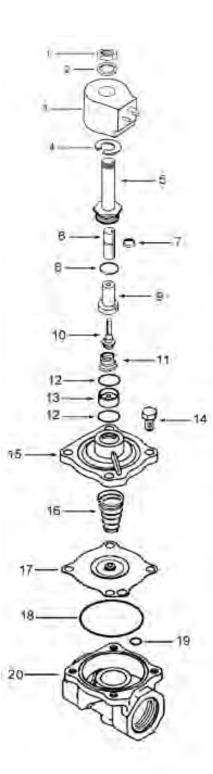
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

### TROUBLE-SHOOTING

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

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



### DESCRIPTION

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

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

### OPERATION

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

### SPECIFICATIONS

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

### **OPERATING TEMPERATURES**

Ambient 32 ° - 125° F	Fluid	32° - 295° F
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For other applications, consult the factory.

### INSTALLATION

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

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

### MAINTENANCE

### Cleaning

### Cleaning fluid must be compatible with all valve components.

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

### PARTS

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

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

08/20/2024

### COIL REPLACEMENT

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

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

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

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

#### **REBUILD KIT**

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

#### **REPAIR KIT**

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

### **REBUILD & REPAIR KIT CHART**

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

#### **COIL CHART**

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

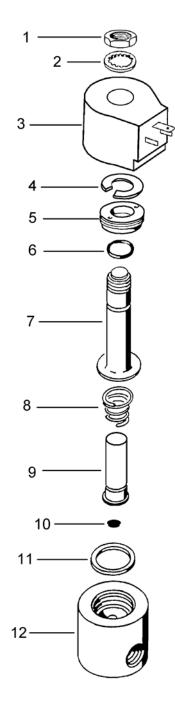
### SERVICE

### DISASSEMBLY AND REPAIR KIT INSTALLATION

### WARNING

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

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



### REBUILD KIT INSTALLATION AND ASSEMBLY

### WARNING

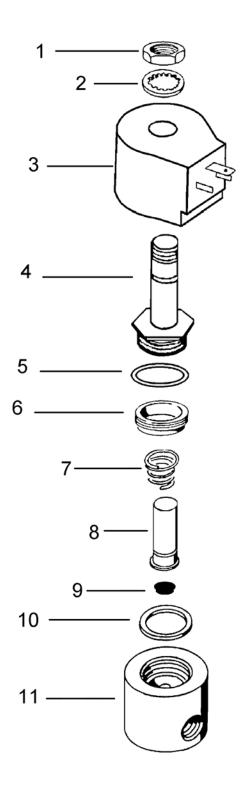
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

### **TROUBLE-SHOOTING**

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

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



### DESCRIPTION

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

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

### OPERATION

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

### SPECIFICATIONS

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

### **OPERATING TEMPERATURES**

Ambient 32° - 125°	Fluid (EPR)	32° - 295° F
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For other applications, consult the factory.

### INSTALLATION

Check valve specifications to make sure of proper application.

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

### MAINTENANCE

### Cleaning

Cleaning fluid must be compatible with all valve components.

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

### PARTS

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

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

### COIL REPLACEMENT

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

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

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

### **REBUILD KIT**

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

#### **REPAIR KIT**

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

### **REBUILD & REPAIR KIT CHART**

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

### **COIL CHART**

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

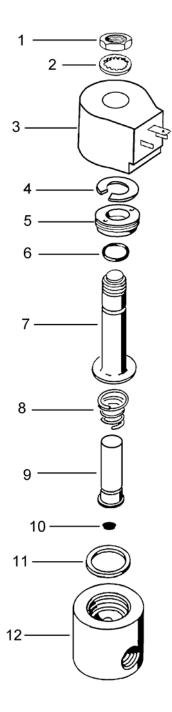
### SERVICE

### DISASSEMBLY AND REPAIR KIT INSTALLATION

WARNING

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

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



### REBUILD KIT INSTALLATION AND ASSEMBLY

### WARNING

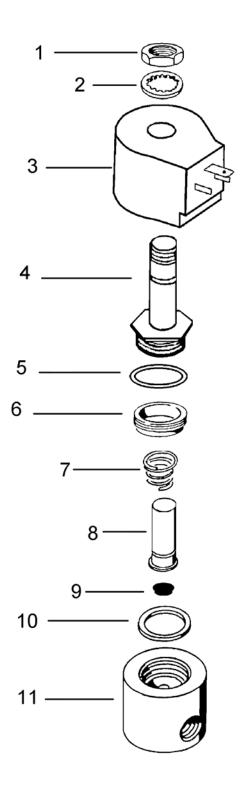
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

### **TROUBLE-SHOOTING**

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

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



## NS711 -- Service and Installation --

### DESCRIPTION

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

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

### OPERATION

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

### SPECIFICATIONS

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

### **OPERATING TEMPERATURES**

Ambient 32° - 125° F	Fluid	32° - 295° F
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For other applications, consult the factory.

### INSTALLATION

Check valve specifications to make sure of proper application.

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

### MAINTENANCE

### COIL REPLACEMENT

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

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

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

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

### PARTS

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

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

### **REBUILD KIT**

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

### **REPAIR KIT**

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

### **REBUILD & REPAIR KIT CHART**

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

### **COIL CHART**

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

### Cleaning

### Cleaning fluid must be compatible with all valve components.

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

### WARNING

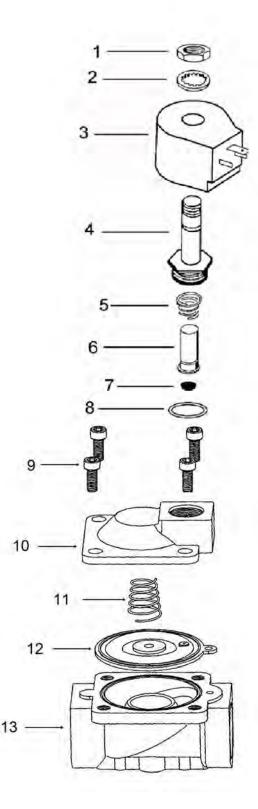
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

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

### TROUBLE-SHOOTING

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

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



## NS712 -- Service and Installation --

### DESCRIPTION

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

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

### **OPERATION**

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

### **SPECIFICATIONS**

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

### **OPERATING TEMPERATURES**

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

For other applications, consult the factory.

### INSTALLATION

Check valve specifications to make sure of proper application.

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

### MAINTENANCE

### COIL REPLACEMENT

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

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

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

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

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

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

### **REBUILD KIT**

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

### **REPAIR KIT**

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

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

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### **COIL CHART**

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

### Cleaning

### Cleaning fluid must be compatible with all valve components.

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

### WARNING

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

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

### TROUBLE-SHOOTING

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

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

