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	*Part numbers shown as NSF Certified, 120vAC, with EPDM seals. See Part Number Selection for more options.*											
			Opera	ting Pre	ssure D	ifferentia	I (PSI)	Part Nu	umber*	6		- ·
Pipe Size	Size	Flow Factor		Ma	IX.	M	ax.			Consumption		Drawing #
(NPT)	(in)	(Cv)	Min.	(Air/	Gas)	(Wa	iter)	DIN Coil	Lead Wire Coil		consumption	
. ,	()	(01)		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)								
1/7″	3/4	4.3	0	I	-	200	125	NT202YH02CPD2	NT202GH02CPD2	11W	10W	3
1/2	3/4	4.3	4	-	-	200	125	NT212YH02CPD2	NT212GH02CPD2	11W	10W	3
3//"	3/4	6.7	0	-	-	200	125	NT202YH02CPE2	NT202GH02CPE2	11W	10W	3
3/4	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					
1)Normally	/ open va	ariation not	t available	e for TP3 s	eries					
②G Housing	g for T20	&T21 Series	has ½" Co	nduit Hub	with 24" Leads.	TP3 Series	has 18" Le	ads		
3See Engi	neering (Guide for a	dditional	voltages v	variations and	ontions				
				voltages, v		options				
(4) IVIUST USE		seals with r	NSF Certif	ied selectio	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.	4.2		0.8	2.5	4.9	0.938	3.5
1/2		mm	106		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"	T 204	in.	4.4		1.0	2.5	5.2	1.188	3.8
3/4	1201	mm	1	11	25	64	133	30	97
2/4"	T211	in.	4.1 (AC)	4.4 (DC)	1.0	2.5	5.2	1.188	3.8
3/4	1211	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 /ว"	T202 &	in.	4.7	0.8	2.5	4.9	0.938	3.5
1/2	T212	mm	119	20	64	124	E Image: Constraint of the second secon	89
2/41	T202 &	in.	4.7	1.0	2.5	5.2	1.188	3.8
3/4	T212	mm	in. 4.7 0.8 2.5 4.9 0.938 mm 119 20 64 124 24 in. 4.7 1.0 2.5 5.2 1.188 mm 119 25 64 133 30	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
Not available for all variate Dimension Weight (Lbs.) 1.1	ns / Weight	
		0.69" 0.34" 0.91" 0.32 0.59 0.30" 0.59 0.59 0.30"

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 F	amily	Frequency (Hz)	Frequency (Hz)				
-	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

* 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	
Se	ries		Operating Mode	Hsg	Coil	Voltage	5	Seal Mat'l	Body Mat'l	Pipe Size	Orific	e Size	
N	N531		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	.10/50 220/50 24/50 DC DC	C: EPDM	2: 303 SS	A: 1/8"	See A	See Above	

Coil Data

Type All

Coil Family		Frequency (Hz)	Frequency (Hz)			50
j.	Size	Nominal Rower	()(A)	Inrush	36	36
	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

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NS30 Series



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



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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
1.2	



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

0.88-

1-4-S-NS301-1

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



Part Numbering

1	2	3	4	5	6	7	8	9	10	11	12	13
NS	3	0	1	G	F	0	2	С	3	В	С	9
Se	ries		Operating Mode	Hsg	Coil	Voltage	5	Seal Mat'l	Body Mat'l	Pipe Size	Orific	e Size
N	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 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V	.10/50 220/50 24/50 DC DC	C: EPDM	3: 303 SS	B: 1/4"	See A	Above

Coil Data

Coil F	amily	Frequency (Hz)		60	50
Туре	Size	Nominal Power ()(A)	Inrush	46	46
All	<u></u> \$4	Normal 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

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•	Р	• •





()	ize		(Opera	ating	Pres	sure	Diffe	rentia	ıl (ps	i)	.dr	T	Po	wer	Model Code
Siz	e S		_				Maxi	mum	l			ax Ten	eria	Consu	mption	(120)/60HZ = 110)/50HZ
Pipe	Orific		imum	Air/	Gas	Wa	ater	Ligh	it Oil	Ste	am*	Fluid	al Mat	(Watts)		(Shown)
NPT	in.	Cv	Min	AC	DC	AC	DC	AC	DC	AC	DC	°F	Se	AC	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	.49	0	—	—	75	20	—	—	_		176	EPR	8	9	NS311GF02C3BE1
	1/4	.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	89	10	11	12	13 14
Ν	S	3	1	1	G	F	02	С	3	B	C
	Ser	ies		Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
	NS	31		1: Normally Closed	G: Conduit	F: Class F H: Class H	02: 120/60 110/50	C: EPR	3: Stainless Steel	B: 1/4" NPT	C1: 1/32" C3: 3/64" C5: 1/16" C7: 5/64" C9: 3/32" D3: 7/64" D5: 1/8" D5: 1/8" D5: 5/32"
				* Se	e the "Engine I	eering Guide	e" for additional v	/oltages, vari I	ations and op	tions	E1: 3/16" E7: 1/4" F1: 9/32"

Coil Data

	Coil F	amily	Frequency (Hz)	Frequency (Hz)							
_	Type All	Size S3	Nominal Power (VA)	Inrush	36	36					
				Holding	13	14					

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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

No	rmally	y Open							<u> </u>					Ene	ergize	d			De-Ene	rgized	
								P	^\ 	^			P						P		→
	Ð	ize			Opera	ating	Pres	sure	Diffe	rentia	al (ps	i)	.du		۱	Po	wer		Model Co	de	
	e Siz	fice S		E				Maxi	mum				Max Id Ten		ateria	Consu (W/	imption	(12	0V/60HZ — 11	0V/50H	z)
	Pip	Orii		nimu	Air/	Gas	Wa	ater	Ligh	t Oil	Ste	am*	Flu		eal M			`	Snown		/
Ν	IPT	in.	Cv	Mi	AC	DC	AC	DC	AC	DC	AC	DC	°F		Ň	AC	DC		Stainless Stee	el Body	
		1/32	.03	0	<u> </u>	—	2400	2400	—	—	_	-	176	E	PR	11	10		NS302GF02	C3BC1	
		3/64	.05	0		—	600	600	—	—			1/6		PR	11	10		NS302GF02	C3BC3	
		5/64	15	0	1	-	235	320 235	_			-	176	 F	PR	11	10		NS302GF02	C3BC7	
	1/4	3/32	.20	0	1_	_	150	150	_	_	_	1_	176	E	PR	11	10		NS302GF02	C3BC9	
		7/64	.25	0	_	_	125	125	_	-	_	_	176	E	PR	11	10		NS302GF02	C3BD3	
		1/8	.30	0	—	—	100	100	—	_		_	176	E	PR	11	10		NS302GF02	C3BD5	
		5/32	.43	0		—	60	60	—	—	_		176	E	PR	11	10		NS302GF02	C3BD7	
		3/16	.65	0	—	—	40	40	—	—	—	—	176	E	PR	11	10		NS302GF02	C3BE1	
	P 2	³	Nu 4	m 	be	ri 1	ng (6	I	7	I	8	9	I	1	o	11		12	13	1
	C			Ιг	^	ו ר			l r	_	٦l			٦l							
	3	3	U		2			7				U				•	3)	В	J	
	Se	eries		Op I	eratii Mode	ng	Hous	sing*	Co	il Cla	SS*	Vc	oltage*		Se Mate	al erial	Bod Mate	ly rial	Pipe Connection	Orific	e Siz
	N	S30		2: N C	Jorma Open	ally See	G: Co	enduit	t F: H:	Class Class	s F s H uide"	02: for a	120/60 110/50 dditiona	al vo	C: EP	R s, varia	3: Stair Stee	nless I nd op	B: 1/4" NPT	C1: 1/ C3: 3/ C5: 1/ C7: 5/ C9: 3/3 D3: 7/6 D5: 1/8 D5: 1/8	'32" '64" '16" '64" 32" 64" 8" '32" (16"

Coil F	amily	Frequency (Hz)	Frequency (Hz)							
Type All	Size 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:	NSE 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:					
	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

Valv	ve Se	lec	etic)n	Li	st												
Normall	y Open	_											Energize	d		De-Energized		
		_					P	`\ '	~			P						
	e		(Opera	ating	Pres	sure	Diffe	rentia	al (ps	i)					Model Code		
ize	Pipe Size	Si.		S.				Maximum						emi	- srial		wer	
Pipe S			imum	Air/	Gas	Wa	ater	Ligh	t Oil	Ste	am*	Fluid T	al Mate	(Wa	atts)	(120V/60HZ — 110V/50HZ) Shown		
NPT	in.	Cv	Min	AC	DC	AC	DC	AC	DC	AC	DC	°F	Sea	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		
	3/32	.22	0	—	—	105	105	—	—		_	176	EPR	8	9	NS312GF02C3BC9		
	7/64	.25	0	—	—	80	80	—		_		176	EPR 8 9 NS		NS312GF02C3BD3			
	1/8	.30	0	—	_	60	60			_		176	EPR	8	9	NS312GF02C3BD5		
	3/16	.65	0	—	—	30	30	_	_	_	_	176	EPR	8	9	NS312GF02C3BE1		
						*	Class	s H C	oil F	leco	nme	nded fo	or Steam	and O	ther H	igh Temperature Applications		

Part Numbering

NS312GF02C	3 B	
		C 1
Series Mode Housing* Coil Class* Voltage* Material Material	ody Pipe terial Connection	Orifice Size
NS31 2: Normally Open G: Conduit H: Class F F: Class F 02: 120/60 C: EPR 3: Sta Sta * See the "Engineering Guide" for additional voltages, variations	ainless B: 1/4" NPT eel and options	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 F	amily	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 (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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L		Т		
	\square	т	_M~	
		Ρ		
_				

Energized



	Model Code	

e	Size			pera	ting F	Pressure Differential (psi) Maximum					mp.	-	Po	wer	Model Code												
ipe Siz	rifice S		Ę	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Max luid Ter	Max Iuid Ter			/ateria	Aateria	Aateria	Aateria	Materia	Consumption (Watts)		(Watts)		(Watts)		(120V/60HZ — 110V/50HZ) Shown)	
n ■	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	С	G 4
	Seri	ies		Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	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	7: S. Steel	C: 3/8"	G4: 5/8"

Coil	Data				
Coil	Family	Frequency (Hz)		60	50
Туре	Size	- Anna the state			
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	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





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

		$ \mathbf{P} $	F	0 2	F	G	1	20	S
e Orifice Siz	Pipe Connection	Body Material	Seal Material	Voltage*	Coil Class*	Housing*	Operating Mode		Series
/8" G4: 5/8"	C: 3/8"	P: Noryl	F: Santoprene/ EPDM	02: 110/120 50/60 Hz 10 Watt	F: Class F N: Class N	G: 1/2" Conduit	1: Normally Closed		NS20
			Santoprene/ EPDM	50/60 Hz 10 Watt	N: Class N	Conduit	Closed		HOLU

Coil Data

Coil	Family	Frequency (Hz)		60	50
Туре	Size		10.000		
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	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







Valv	ve Se	elec	etic	on	Li	st									
Normall	y Close	ed		8								Energ	jized		De-Energized
					Д	1	L T P		v		P	Ē		↦	
	je.		C	pera	ting I	Press	ure [Differ	entia	l (psi)	Ö.		Po	wer	Model Code
ize	Siz					Ma	ximu	m			x	8	Consu	mption	(120V/60H7 110V/50H7)
ipe S	rifice		ш	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Ma: Iuid Te	Aateri	(Wa	atts)	(Shown)
۹ NPT	O IN	cv	Minim	AC	DC	AC	DC	AC	DC	AC	۰F	Seal N	AC	DC	Stainless Steel Body Type 316
3/8"	5/8"	4.3	4	-	-	150	100	_	-	-	295	Santo EPR	8	10	NS211GF02F7CG4
6						*	01				and all a se	14		I Other	I Bals Townson town Americantions

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

Part Numbe	ring							
1 2 3 4	5	6	7	8 9	10	11	12	13 14
NS21 Series	Operating Mode	G Housing*	F Coil Class*	02 Voltage*	Seal	7 Body Material	Pipe	G 4 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		1.000		
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	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

Weight (Ibs.)
0.9





valv	e Se	lec)n	Lı	st									
Normally	/ Close	ed		Γ								Energ	gized		De-Energized
					7	1	L T P		∿		P	Ē		↦	
a	Size		C	pera	ting F	Press Ma	ure [ximu	Differ m	entia	l (psi)	np.	-	Po	wer	Model Code
ipe Siz	rifice S		m	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Max luid Ter	Aateria	Consu (Wa	atts)	(120V/60HZ — 110V/50HZ) Shown)
■ NPT	O IN	cv	Minim	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	rt i	Nur	nbe	ering							
1	2	3	4	5	6	7	8 9	10	11	12	13 14
Ν	S	2	1	1	G	F	0 2	F	Ρ	C	G 4
_	Ser	ies		Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
	NS	21		1: Normally Closed	G: 1/2" Conduit	F: Class F N: Class N	02: 110/120 50/60 Hz 10 Watt	F: Santoprene/ EPDM	P: Noryl	C: 3/8"	G4: 5/8"
-									<u>1.</u> 1.		

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





- 3/8" NPT

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



Orifice: Lead Free Brass Electrical Standard Housing: Encapsulated Waterproof Conduit (NEMA 4X) Optional Housings: Metal Conduit, Explosion-Proof (NEMA 7), Group open Frame, Junction Box (single or dual known) DIN, Contact GC Valves Customer Svc. For o Standard Voltages: 24, 120, 240, AC, 60 and/or 50 Hz. Available 6, 12, 24 DC Contact GC Valves Customer Svc. For Addition Voltage Tolerance: + 10% of applicable volltage Coil Classes: F, H, N Standard Lead Length: 24 inches Operating Temperature Ambient (Nominal): 32° F to 125° F Mounting Position: Upright and Vertical Approvals* Agency: NSF/ANSI - 61/ NSF-372/ UR -CSA Recogniz * Not available for all variations 4.00 4.00		Seals:	NSF Approved Ethylene Propylene
Electrical Standard Housing: Encapsulated Waterproof Conduit (NEMA 4X) Optional Housings: Metal Conduit, Explosion-Proof (NEMA 7), Gr Open Frame, Junction Box (single or dual kno DIN, Contact GC Valves Customer Svc. For o Standard Voltages: 24, 120, 240, AC, 60 and/or 50 Hz. Available 6, 12, 24 DC Contact GC Valves Customer Svc. For Addition Voltage Tolerance: ± 10% of applicable volltage Coil Classes: F, H, N Standard Lead Length: 24 inches Operating Temperature Ambient (Nominal): 32° F to 125° F Mounting Position: Upright and Vertical Approvals* Agency: NSF/ANSI - 61/ NSF-372/ UR -CSA Recogniz * Not available for all variations Dimensions / Weight 2.5		Orifice:	Lead Free Brass
Optional Housings: Metal Conduit, Explosion-Proof (NEMA 7), Group Frame, Junction Box (single or dual known DIN, Contact GC Valves Customer Svc. For or Standard Voltages: 24, 120, 240, AC, 60 and/or 50 Hz. Available 6, 12, 24 DC Contact GC Valves Customer Svc. For Addition Voltages 6, 12, 24 DC Voltage Tolerance: ± 10% of applicable voltage Coil Classes: F, H, N Standard Lead Length: 24 inches Operating Temperature Ambient (Nominal): 32° F to 125° F Mounting Position: Upright and Vertical Approvals* Agency: * Not available for all variations	Electrical	Standard Housing:	Encapsulated Waterproof Conduit (NEMA 4X)
Open Frame, Junction Box (single or dual kno DIN, Contact GC Valves Customer Svc. For o Standard Voltages: 24, 120, 240, AC, 60 and/or 50 Hz. Available 6, 12, 24 DC Contact GC Valves Customer Svc. For Addition Voltage Tolerance: ± 10% of applicable volltage Coil Classes: F, H, N Standard Lead Length: 24 inches Operating Temperature Ambient (Nominal): 32° F to 125° F Mounting Position: Upright and Vertical Approvals* Agency: * Not available for all variations Dimensions / Weight 4.00 4.00		Optional Housings:	Metal Conduit, Explosion-Proof (NEMA 7), Grommet
DIN, Contact GC Valves Customer Svc. For o Standard Voltages: 24, 120, 240, AC, 60 and/or 50 Hz. Available 6, 12, 24 DC Contact GC Valves Customer Svc. For Addition Voltage Tolerance: ± 10% of applicable voltage Coil Classes: F, H, N Standard Lead Length: 24 inches Operating Temperature Ambient (Nominal): 32° F to 125° F Mounting Position: Upright and Vertical Approvals* Agency: * Not available for all variations			Open Frame, Junction Box (single or dual knockouts),
Standard Voltages: 24, 120, 240, AC, 60 and/or 50 Hz. Available 6, 12, 24 DC Contact GC Valves Customer Svc. For Addition Voltage Tolerance: ± 10% of applicable volltage Coil Classes: F, H, N Standard Lead Length: 24 inches Operating Temperature Ambient (Nominal): 32° F to 125° F Mounting Position: Upright and Vertical Approvals* Agency: * Not available for all variations Dimensions / Weight 4.00 4.00			DIN, Contact GC Valves Customer Svc. For others.
6, 12, 24 DC Contact GC Valves Customer Svc. For Addition 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 Recogniz * Not available for all variations Dimensions / Weight <u>4,00</u>		Standard Voltages:	24, 120, 240, AC, 60 and/or 50 Hz. Available
Contact GC Valves Customer Svc. For Addition 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 Recogniz * Not available for all variations Dimensions / Weight <u>4.00</u>			6, 12, 24 DC
Voltages Voltage Tolerance: ± 10% of applicable volltage Coil Classes: F, H, N Standard Lead Length: 24 inches Operating Temperature Ambient (Nominal): 32° F to 125° F Mounting Position: Upright and Vertical Approvals* Agency: * Not available for all variations			Contact GC Valves Customer Svc. For Additional
Voltage Tolerance: ± 10% of applicable volltage Coil Classes: F, H, N Standard Lead Length: 24 inches Operating Temperature Ambient (Nominal): 32° F to 125° F Mounting Position: Upright and Vertical Approvals* Agency: NSF/ANSI - 61/ NSF-372/ UR -CSA Recogniz * Not available for all variations Image: Standard Leagency (Lbs.) 2.5 Image: Standard Leagency (Lbs.) 2.5			Voltages
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 Recogniz * Not available for all variations Veight (Lbs.) 1 2.5 2.5 10 1		Voltage Tolerance:	<u>+</u> 10% of applicable volltage
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 Recogniz * Not available for all variations Dimensions / Weight Veight (Lbs.) 2.5		Coil Classes:	F, H, N
Operating Temperature Ambient (Nominal): 32° F to 125° F Mounting Position: Upright and Vertical Approvals* Agency: NSF/ANSI - 61/ NSF-372/ UR -CSA Recogniz * Not available for all variations * Dimensions / Weight Image: 4.00 model 4.00 model 3.10 model 3.10 model 3.10 model		Standard Lead Length:	24 inches
Mounting Position: Upright and Vertical Approvals* Agency: NSF/ANSI - 61/ NSF-372/ UR -CSA Recogniz * Not available for all variations Image: Comparison of the second seco	Operating Temperature	Ambient (Nominal):	32° F to 125° F
Approvals* Agency: NSF/ANSI - 61/ NSF-372/ UR -CSA Recogniz * Not available for all variations Dimensions / Weight Weight (Lbs.) 2.5	Mounting	Position:	Upright and Vertical
* Not available for all variations Dimensions / Weight Weight (Lbs.) 2.5 	Approvals*	Agency:	NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized
	Dimension Weight (Lbs.) 2.5	s / 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
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 VI 16: 24 VI	10/50 20/50 24/50 DC 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	
Neminal Dower ()(A)	Inrush	36	36
Noffiniai Power (VA)	Holding	13	14

NS202 Series



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



Materials	Seals:		Santoprene/NSF Approved EPDM				
	Orifice:	Pilot Main	Stainless Steel Stainless Steel Ø 5/8"				
Electrical	Standard Hou	using:	NEAM 4/4X Encapsulated - 1/2" Conduit				
	Optional Hou	sings:	Contact GC Valves Customer Service for available options.				
	Standard Volt	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				
Operating Temperature	Ambient (Nor	minal):	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 31

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

Valve Selection List

Normall	ly Open	-										Energ	ized		De-Energized
		_				T T	P		~		 P				
ze	Size	(С)pera	perating Pressure Differential (psi) Maximum					k emp.	а	Po	wer	Model Code	
pe Si			ш	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Max Iuid Te	/ateri	(Wa	atts)	(1200/60HZ — 1100/50HZ) Shown)
		Cv	Minim	AC	DC	AC	DC	AC	DC	AC	°F	Seal N	AC	DC	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 Family		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 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 Lengt	h:	24 inches		
Operating Temperature	Ambient (Nominal):		32° F to 125° F		
Mounting	Position:		Any		
Approvals*	Agency:		NSF/ANSI - 61-G / NSF-372 / UR Recognized		

* Not available for all variations

Dimensions / Weight







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

3/8-P-NS202-1

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

Valve Selection List

Normally Open

Γ	T		7
	T	 P	





ize	0	perating I	emp.	al	Power Consumption		Model Code					
ipe S	Drifice		E Air/Gas		Water		Mai Iuid To Materi		(Watts)		(120V/60HZ — 110V/50HZ Shown	
∟ NPT	Ō	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 Family		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 Hou	using:	NEAM 4/4X Encapsulated - 1/2" Conduit				
	Optional Hou	sings:	Contact GC Valves Customer Service for available options.				
	Standard Volt	ages:	24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; Contact GC Valves Customer Service for Additional Voltages.				
	Voltage Tolera	ance:	±10% of applicable voltage				
	Coil Classes:		F, H, N				
	Standard Lea	d Length:	24 inch				
Operating Temperature	Ambient (Nor	ninal):	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

Normall	ly Open	-							Enerç	gized		De-Energized				
ze	Size		С)pera	ting F	Press I	ure D Maxin	Differe num	ential	(ps	i)	mp.	la	Pov	wer	Model Code
ipe Si	rifice (ш	Air/	Gas	Wa	ater	Ligh	nt Oil	Ste	am*	Max luid Te	/ateria	(Wa	atts)	(120V/60HZ — 110V/50HZ Shown)
	IN	Cv	Minim	AC	DC	AC	DC	AC	DC	AC	DC	۴	Seal N	AC	DC	Stainless Steel Body Type 316
3/8	5/8	3.3	3	_	_	200	125	_	_	_	_	176	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:		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

* 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

	Т		
\square	Т		
		Р	

Energized



ize	Size		0	perating I	Pressure I Maxii	Differentia mum	ıl (psi)	emp.	emp. ial		wer	Model Code (120V/60HZ — 110V/50HZ) Shown	
ipe Si	Drifice		E Ai		Gas	Wa	ater	-Iuid Te	Materi	(Wa	atts)		
NPT	IN	Cv	Minim	AC	DC	AC	DC	°F	Seal I	AC	DC	Nylon Body	
3/8	5/8	3.3	3	-	-	200	125	176	EPR SANTO	11	10	NS212GF02FPCG4	



Coil Family		Frequency (Hz)		60	50
 Type 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		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	C: 3/8"	G1:	1/2"

Coil Data

Coil Family						
Туре	Size					
All	S3					

Frequency (Hz)	60	50	
Nominal Dower ()(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 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

Weight (lbs.)	
1.9	





Valve Selection List

Normally Closed

	T	
	т	~
	Р	

Energized



ze	ze Size		C)pera	ting I	^o ress Ma	ure [ximu	Differ m	entia	l (psi)	c emp.	al	Po	wer	Model Code	
^o ipe Si	Drifice		unu	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Hay Iuid Te	Iuid Te		atts)	(120V/60H2 — 110V/50H2 Shown	
NPT	IN	cv	Minin	AC	DC	AC	DC	AC	DC	AC	°F	Seal	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



Coil Data	
-----------	--

Coil	Family	Frequency (Hz)	60	50	
Туре	Size				1.
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 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





Valv	Valve Selection List														
Normall	y Close	d										Energ	ized		De-Energized
	<u> </u>	-			∕		Т Т Р		~		P	ł		₽	
	ze		С	pera	ting F	Press	ure [Differ	entia	l (psi)	ä		Po	wer	Model Code
ize	Siz					Ma	ximu	m			emi	a	Consu	mption	(120V/60HZ - 110V/50HZ)
ipe S	Irifice		m	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Ma Iuid T	Mater	(Wa	atts)	Shown
NPT	IN	cv	Minim	AC	DC	AC	DC	AC	DC	AC	°F	Seal	AC	DC	Noryl Body
1/2"	5/8	4.3	0		-	100	90	-	-	_	295	Santo EPR	10	10	NS201GF02FPDG4
						*	Class	~ LI (Coll	Decomm	ondor	for Sta	0 00 00	d Otho	or High Tomporature Applications

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

Pa	art 1	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
	Series			Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	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	P: Noryl	D: 1/2"	G4: 5/8"
_							· · · · · ·				

Coil Data	E 16 CT 1

Coll	Family	Frequency (Hz)	60	50	
Туре	Size		and the second second		
All S4	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 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

Weight (Ibs.)	
1.8	





Valv	ve Se	elec	tic	on	Li	st									
Normall	y Close	ed		Г								Energ	gized		De-Energized
	-	_			Д	1	T P	h	∿		P]	₽	
ze	Size		С	pera	ting I	Press Ma	ure (ximu	Differ m	entia	l (psi)	mp.	la	Po	wer	Model Code
pe Si	rifice		Ę	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Max uid Te	lateria	(Wa	atts)	$\left(\begin{array}{c} 120V/60HZ - 110V/50HZ \\ Shown \end{array} \right)$
	O IN	Cv	Minim	AC	DC	AC	DC	AC	DC	AC	°F	Seal N	AC	DC	Stainless Steel Body Type 316
1/2	5/8	4.3	4	-	-	150	100	-	_	-	295	Santo EPR	8	10	NS211GF02F7DG4
						*	Clas	sH (Coil	Recomm	nended	for Ste	am an	d Other	er High Temperature Application

Π.

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

Coil	Data	- 1			
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
- 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 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

Weight (lbs.)	
0.9	





Valv	e Se	lec	tic	n	Li	st									
Normally	/ Close	d		Г								Energ	ized		De-Energized
		_			7	1	I T P	W	v		P			↦	
e	Size		0	pera	ting I	Press	ure D ximur	Differ m	entia	l (psi)	mp.	=	Por	wer	Model Code
ipe Siz	orifice S		m	Air/	Gas	Wa	ter	Ligh	nt Oil	Steam*	Max luid Ter	Materia	Consu (Wa	mption atts)	(120V/60HZ — 110V/50HZ) Shown)
L NPT	0 IN	cv	Minim	AC	DC	AC	DC	AC	DC	AC	°F	Seal N	AC	DC	Noryl Body
1/2	5/8	4.3	4	-	-	150	100	-	-	—	295	Santo EPR	8	10	NS211GF02FPDG4

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

Part Numbe	ring								
1 2 3 4 NS21	5	6 G	7 F	° °	10 F	11 P	12 D	13 14 G 4	
Series	Operating Mode	Housing*	g* Coil Class* Voltage* Seal Materia		Seal Material	Body Material	Pipe Connection	Orifice Size	
NS21	1: Normally Closed	G: 1/2" Conduit	F: Class F N:Class N	02: 110/120 50/60 Hz 10 Watt	F: Santoprene/ EPDM	P: Noryl	D: 1/2"	G4: 5/8"	
	_			<u>.</u>					

Coil Data					
Coil	Family	Frequency (Hz)		60	50
Type Size			a familie	1000	
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



Seals:	NSF Approved Ethylene Propylene
Orifice:	Lead Free Brass
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
Ambient (Nominal):	32° F to 125° F
Position:	Upright and Vertical
Agency:	NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized
ns / Weight	
	Stans. Orifice: Standard Housings: Optional Housings: Standard Voltages: Standard Voltages: Voltage Tolerance: Coil Classes: Standard Lead Length: Ambient (Nominal): Position: Agency: ions

1-2-B-NS711-1

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



Part Numbering

1	2	3	4	5	6	7	7 8		10	11	12	13
NS	7	1	1	G	F	0	2	С	9	D	G	1
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 VI 16: 24 VI	02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC		9: Brass Lead Free	D: 1/2"	G1: :	1/2"

Coil Family								
Туре	Size							
All	S3							

Frequency (Hz)	Frequency (Hz)					
Neminal Dower ()(A)	Inrush	36	36			
Noffiniai 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: F	Pilot Main	Stainless Steel Stainless Steel Ø 5/8"
Electrical	Standard Hous	ing:	NEAM 4/4X Encapsulated - 1/2" Conduit
	Optional Housir	ngs:	Contact GC Valves Customer Service for available options.
	Standard Voltag	ges:	24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; Contact GC Valves Customer Service for Additional Voltages.
	Voltage Toleran	ice:	±10% of applicable voltage
	Coil Classes:		F, H, N
	Standard Lead	Length:	24 inch
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



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	_										Energ	ized		De-Energized
ze	o Operating Pressure Differential (psi) N Image: Color of the second s						k emp.	a	Po	wer	Model Code				
ipe Si	Irifice		ш	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	May Iuid Te	/ateri	(Wa	atts)	(1200/60HZ — 1100/50HZ) Shown)
		cv	Minim	AC	DC	AC	DC	AC	DC	AC	۴	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 F	amily	Frequency (Hz)	Frequency (Hz)						
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 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 Len	igth:	24 inches		
Operating Temperature	Ambient (Nominal)		32° F to 125° F		
Mounting	Position:		Any		
Approvals*	Agency:		NSF/ANSI - 61-G / NSF-372 / UR Recognized		

* Not available for all variations

Dimensions / Weight







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

[Т		7
\square	Т	P	<u>_</u> ///

Energized



ze	Size		С	perating I	Pressure Maxi	Differentia mum	al (psi)	emp.	al	Po		
ipe Si	Drifice		m	Air/Gas		Wa	Water		Materi	(Wa	atts)	(120V/60HZ — 110V/50HZ Shown)
∩_ NPT	IN	Cv	Minim	AC	DC	AC	DC	°F	Seal I	AC	DC	Nylon Body
1/2	5/8	4.3	0	-	-	200	125	176	EPR SANTO	11	10	NS202GF02FPDG4



Coil Family		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 Hous	ing:	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 Tolerar	nce:	±10% of applicable voltage
	Coil Classes:		F, H, N
	Standard Lead	Length:	24 inch
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



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 Family		amily	Frequency (Hz)	Frequency (Hz)				
	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 Housin	g:	NEAM 4/4X Encapsulated - 1/2" Conduit
	Optional Housing	S:	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 Toleranc	e:	<u>+</u> 10% of applicable volltage
	Coil Classes:		F, H, N
	Standard Lead Lo	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

T	A	
Т	P P	

Energized



ize	Size		0	perating F	Pressure I Maxii	Differentia mum	ıl (psi)	emp.	a	Por Consu	wer mption	
ipe S	Drifice		unu	Air/	Gas	Wa	iter	-Iuid Te	Materi	(Wa	(Watts) (120V/60H2 — 110V/50 Shown	
NPT	IN	Cv	Minim	AC	DC	AC	DC	°F	Seal	AC	DC	Nylon Body
1/2	5/8	3.3	3	-	-	200	125	176	EPR SANTO	11	10	NS212GF02FPDG4



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





- 1/2" NPT

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



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

* Not available for all variations

Dimensions / Weight

Weight (Lbs.)	
2.5	



1.61



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

1-2-B-NS712-1

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



Part Numbering

1	2	3	4	5	6	7	8	9	10	11	12	13
NS	7	1	2	G	F	0	2	С	9	D	G	1
Se	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 1 04: 240/60 2 24: 24/60 2 15: 12 VI 16: 24 VI	10/50 20/50 24/50 DC DC	C: EPDM	9: Brass Lead Free	D: 1/2"	G1: :	1/2"

Coil Data

Coil Family					
Туре	Size				
All	S3				

Frequency (Hz)		60	50
Nominal Dower ()(A)	Inrush	36	36
Nominal 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	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	e 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







Valv	e Se	elec	tic	n	Li	st									
Normall	y Close	be			Г	1	т Т	h	~			Energ	jized	1	
ize	Size		C	pera	ting F	^o ress Ma	P ure (ximu	Differ	entia	l (psi)	P emp.		Po	wer	Model Code
pe S	rifice		m	Air/	Gas	Wa	ter	Ligh	nt Oil	Steam*	Ma. Uid Te	Aateri	(Wa	atts)	(Shown
۵. NPT	O IN	Cv	Minim	AC	DC	AC	DC	AC	DC	AC	°F	Seal N	AC	DC	Stainless Steel Body Type 316
3/4	3/4	6.7	0		-	100	90	9	Ţ	b-d	295	Santo EPR	10	10	NS201GF02F7EG5

Part Numbe	ring							
1 2 3 4	5	6	7	89	10	11	12	13 14
N S 2 0	1	G	F	02	F	7	Ε	G 5
Series	Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
NS20	1: Normally Closed	G: 1/2" Conduit	F: Class F N:Class N	02: 110/120 50/60 Hz 10 Watt	F: Santoprene/ EPDM	7: S. Steel	E: 3/4" NPT	G5: 3/4"

Coil	Data					
Coil	Family	Frequency (Hz)		60	50	
Туре	Size		1.4.5	1		
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	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	re 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







Valve Selection List

Normally Closed

	T T	\mathbf{k}	
	P	_	

E	nerg	ized	
₽			•



ze	Size		C	perating Pressure Differential (psi) Maximum							k emp.	al	Por	wer			
ipe Si	rifice		m	Air/	Gas	Wa	ater	Ligh	t Oil	Steam*	Max Iuid Te	Materi	(Wa	atts)	(120V/60HZ — 110V/50HZ) 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	Nominal Power (VA)	Inrush	46	46
All	S4.		Holding	18	23
	1		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 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	e Ambient (Nominal):		32° F to 125° F
Mounting	Position:		Any
Approvals*	Agency:		NSF/ANSI - 61-G / NSF-372 / UR Recognized

* Not available for all variations

Dimensions / Weight

Weight (lbs.)	
1.9	





Valv	ve Se	elec	etic)n	Li	st									
Normall	y Close	ed								6) i		Energ	ized		De-Energized
	-	_		G	7	1	L T P		∿		P				
	e		C	pera	ting F	Press	ure [Differ	entia	l (psi)	· ·		Po	wor	Model Code
ize	Siz			Maximum							x dia	al	Consumption		(120V/60HZ 110V/50HZ)
ipe S	rifice		ш	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Ma. Iuid To	Aater	(Wa	atts)	(Shown)
٩.	0		nim	10	DC	10	DC	10		10	<u>ш</u>	al N	10		Stainless Steel Body
NPT	IN	Cv	Mi	AC		AC	DC	AC	DC	AC	°F	Se	AC		Type 316
3/4"	3/4"	6.7	4	-	-	150	100	—	-	-	295	Santo EPR	8	10	NS211GF02F7EG5
						*	Class	~ L (Coll	Decomm	ondod	for Sto	000 000	d Otho	Ligh Tomporature Applications

ons

Pa	rt N	lun	nbe	ring							
1	2	3	4	5	6	7	8 9	10	11	12	13 14
N	S	2	1	1	G	F	0 2	F	7	E	G 5
	Serie	s	_	Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
	NS21	1		1: Normally Closed	G: 1/2" Conduit	F: Class F N: Class N	02: 110/120 50/60 Hz 10 Watt	F: Santoprene/ EPDM	7: S. Steel	E: 3/4"	G5: 3/4"
			4								_

Coil	Data				
Coil Family		Frequency (Hz)	60	50	
Туре	Size		- 1	10	
AC	S3	 Nominal Power (VA) 	Inrush	46	46
DC	S4		Holding	18	25

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 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



Valve Selection List

Normall	y Close	ed			Я	1	L T P	h	~		P		gized	₽	De-Energized		
ize	Size	e Size			C	pera	ting f	^{>} ress Ma	ure (ximu	Differ m	ential	l (psi)	ax Temp.	rial	Po Consu	wer mption	Model Code (120V/60HZ — 110V/50HZ)
ipe	Drifice		m	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Iuid 7	Mate	(Wa	atts)	Shown		
NPT	IN	cv	Minim	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	nendec	for Ste	am an	d Other	r High Temperature Applications		

Part Numbe	ering							
1 2 3 4 NS 2 1	5	6 G	7 (F)	⁸ ⁹	10 F	11 P	12 F	13 14
Series	Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
NS21	1: Normally Closed	G: 1/2" Conduit	F: Class F N:Class N	02: 110/120 50/60 Hz 10 Watt	F: Santoprene/ EPDM	P: Noryl	E: 3/4"	G5: 3/4"
2								

Coil	Data				
Coil Family		Frequency (Hz)	60	50	
Туре	Size		1.000	10	
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
* Not available for all variati	ons	
Dimension	ıs / Weight	







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



Part Numbering

1	2	3	4	5	6	7	7 8		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 VI 16: 24 VI	10/50 20/50 24/50 DC DC	C: EPDM	9: Brass Lead Free	E: 3/4"	G5: :	3/4"

Coil Family								
Туре	Size							
All	S3							

Frequency (Hz)	60	50	
Neminal Dower ()(A)	Inrush	36	36
Noffiniai 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	IS:	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	ll):	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	





Valv	ve Se	lec	etic	n	Li	st									
Normall	y Open	-										Energ	jized		De-Energized
		_				T T	P	<u>_</u> \	~		 P	, ►=[-			
	ize		С)pera	ting F	^o ress	ure E	Differ	entia	l (psi)	ġ		Po	wer	Model Code
ipe Size	rifice S		E Air/Gas Water Light Oil Steam*	Air/Gas Water Light Oil			E Air/Gas Water Light Oil Stea	ateria Aateria		Consumption (Watts)		(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
3/4	3/4	6.7	0	_	. <u> </u>	200	125	_	s—		295	EPR Santo	11	10	NS202GF02F7EG5
						*	Class	s H C	Coil F	Recomm	ended	for Ste	am an	d Othe	r High Temperature Applications

	Par	t Nı	uml	pering							
1 N	2 S	3 2	4 0	5 2	6 G	7 F	⁸ 9 0 2	10 F	11 7	12 E	13 14
	Ser	ies	es Operating Housi		Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
	NS	20		2: Normally Open	G: 1/2" 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 the "Engineering Guide" for additional voltage								/oltages, vari	ations and op	otions.	

Coil Data

 Coil F	amily	Frequency (Hz)	Frequency (Hz)					
 Туре	Size							
ALL	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 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 Lengt	th:	24 inches
Operating Temperature	Ambient (Nominal):		32° F to 125° F
Mounting	Position:		Any
Approvals*	Agency:		NSF/ANSI - 61-G / NSF-372 / UR Recognized

* Not available for all variations

Dimensions / Weight







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 T		$\lambda_{\lambda_{\ell}}$
	P	

Energized



ize	Size		C	perating F	Pressure I Maxii	Differentia mum	ıl (psi)	emp.	al	Pov 			
ipe S	Drifice		um	Air/	Gas	Wa	ater	Iuid T	Mater	(Wa	atts)	(1200/60H2 — 1100/50H2) Shown	
NPT	IN	Cv	Minim	AC	DC	AC	DC	°F	Seal N	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
- Stainless Steel Body **Type 316**
- 2-Way Piloted Diaphragm
- Normally Open



Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel Ø 3/4"
Electrical	Standard Hou	sing:	NEAM 4/4X Encapsulated - 1/2" Conduit
	Optional Hous	ings:	Contact GC Valves Customer Service for available options.
	Standard Volta	ages:	24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; Contact GC Valves Customer Service for Additional Voltages.
	Voltage Tolera	ince:	±10% of applicable voltage
	Coil Classes:		F, H, N
	Standard Lead	d Length:	24 inch
Operating Temperature	Ambient (Nom	ninal):	32°F to 125°F
Mounting	Position:		Any
Approvals*	Agency:		NSF/ANSI - 61-G / NSF-372 / UR Recognized

* 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 Numl	bering							
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	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"
	* Se	e the "Engine	eering Guide	" for additional v	oltages, vari	ations and op	tions.	

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 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

* 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	Size	Nominal Power (VA)	Inrush	46	46			
ALL 55			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	





Valv	Valve Selection List														
Normally Open												Energ	jized		De-Energized
					T T	P	<u>_</u> \	~		 P	, ►=[-				
	ize		С)pera	ting F	^o ress	ure E	Differ	entia	l (psi)	ġ		Po	wer	Model Code
ipe Size	rifice S		m	Air/	Gas	Wa	ater	Ligh	nt Oil	Steam*	Max luid Tem	Aaterial	Consu (Wa	Imption atts)	(120V/60HZ — 110V/50HZ) Shown)
n_ NPT	O IN	cv	E AC DC AC DC AC DC		AC	°F			DC	Stainless Steel Body Type 316					
3/4	3/4	6.7	0 — — 200 125 — —				295	EPR Santo	11	10	NS202GF02F7EG5				
	* Class H Coll Recommended for Steam and Other High Temperature Applications														

	Par	t Nı	uml	pering							
1 N	2 S	3 2	4 0	5 2	6 G	7 F	⁸ 9 0 2	10 F	11 7	12 E	13 14
	Series			Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
NS20			2: Normally Open	G: 1/2" 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"	
				* Se	e the "Engine	eering Guide	" for additional v	/oltages, vari	ations and op	otions.	

Coil Data

Co	il Family	Frequency (Hz)	60	50	
Туре	Size				
ALL	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



Materials	Seals:		Santoprene/NSF Approved EPDM				
	Orifice:	Pilot Main	Stainless Steel Stainless Steel Ø 3/4"				
Electrical	Standard Hou	using:	NEAM 4/4X Encapsulated - 1/2" Conduit				
	Optional Hou	sings:	Contact GC Valves Customer Service for available options.				
	Standard Volt	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				
Operating Temperature	Ambient (Nor	minal):	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 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	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	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 the "Engineering Guide" for additional voltages, variations and options.							otions.	

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

* 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		
Т		
	Ρ	

Energized



ize	O Size		perating F	Pressure I Maxii	Operating Pressure Differential (psi) Maximum					wer motion	Model Code	
ipe S	Drifice		um	Air/	Gas	Wa	ater	Iuid T	Mater	(Wa	atts)	(1200/00H2 — 1100/30H2 Shown
NPT	IN	Cv	Minim	AC	DC	AC	DC	°F	Seal N	AC	DC	Nylon Body
3/4	3/4	6.7	0	-	-	200	125	176	EPR SANTO	11	10	NS202GF02FPEG5



Coil Family		Frequency (Hz)		60	50
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 Housi	ng:	NEAM 4/4X Encapsulated - 1/2" Conduit				
	Optional Housin	igs:	Contact GC Valves Customer Service for				
			available options.				
	Standard Voltag	166.	24 120 240 AC 60 and/or 50 Hz Available				
		<i>j</i> 03.	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 (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







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 Family		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
Se	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	10/50 20/50 24/50 DC DC	C: EPDM	9: Brass Lead Free	E: 3/4"	G5: :	3/4"

Coil Data

Coil Family					
Type Size					
All	S3				

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

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
Se	ries		Operating Mode	Hsg	Coil	Voltage	5	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	10/50 20/50 24/50 DC DC	C: EPDM	7: 316 SS	F: 1"	G9	: 1"

Coil Family				
Туре	Size			
All	S4			

Frequency (Hz)	60	50	
Nominal Power (VA)	Inrush	46	46
	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
Se	ries		Operating Mode	Hsg	Coil	Voltage	2	Seal Mat'l	Body Mat'l	Pipe Size	Orific	e Size
N	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	10/50 20/50 24/50 DC DC	C: EPDM	P: Nylon	F: 1"	G9	: 1"

Coil Family				
Туре	Size			
All	S4			

Frequency (Hz)	60	50	
Nominal Power (VA)-	Inrush	46	46
	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
Se	ries		Operating Mode	Hsg	Coil	Voltage		Seal Mat'l	Body Mat'l	Pipe Size	Orific	e Size
N	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	
Naminal Dowor ()(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
N	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	P: Nylon	F: 1"	G9	: 1"

Coil Family					
Туре	Size				
All	S3				

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

NS21 Series



- 1" 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.)	
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: 120/60 110/50 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 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
Se	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







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
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: 120/60 110/50 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
* Not available for all variati	ons	

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
Se	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
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
Se	ries		Operating Mode	Hsg	Coil	Voltage	2	Seal Mat'l	Body Mat'l	Pipe Size	Orific	ce 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 (VA)-	Inrush	36	36
	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
Se	ries		Operating Mode	Hsg	Coil	Voltage		Seal Mat'l	Body Mat'l	Pipe Size	Orific	ce 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	G: 1 1/4"	J2: 1	. 1/4"

Coil Family					
Туре	Size				
All	S3				

Frequency (Hz)	60	50	
Nominal Dower ()(A)	Inrush	36	36
Norminal 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
Se	ries		Operating Mode	Hsg	Coil	Voltage		Seal Mat'l	Body Mat'l	Pipe Size	Orific	e Size
N	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	G: 1 1/4"	J2: 1	. 1/4"

Coil Family					
Туре	Size				
All	S3				

Frequency (Hz)	60	50	
Nominal Power ()(A)	Inrush	36	36
Norminal 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
Se	ries		Operating Mode	Hsg	Coil	Voltage		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: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC		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 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 1/2" 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		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	H: 1 1/2"	J2: 1	. 1/4"

Coil Family			
Type Size			
All	S4		

Frequency (Hz)	60	50	
Nominal Dowor ()(A)	Inrush	46	46
Norminal 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
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: 120/60 110/50 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			
Type Size			
All	S3		

Frequency (Hz)	60	50	
Nominal Power ()(A)	Inrush	36	36
Norminal 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
Series		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: 120/60 110/50 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
	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	H	J	5				
Se	Series		Operating Mode	Hsg	Coil	Voltage		Voltage		Voltage		Seal Mat'l	Body Mat'l	Pipe Size	Orific	e Size
N	571		1: N.C.	G: Conduit	F: F Class	02: 120/60 110/50		C: EPDM	9: Lead	H: 1 1/2"	J5: 1	1/2"				
				Y: DIN	H: H Class	04: 240/60 220/50			Free Brass							
			A: Conduit		24: 24/60 24/50											
				U: J-Box		15: 12 VDC										
				P Opn Frame		16: 24 V	DC									

Coil Family						
Туре	Size					
All	S3					

Frequency (Hz)	60	50	
Nominal Power ()(A)	Inrush	36	36
Norminal 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			
	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
Series		Operating Mode	Hsg	Coil	Voltage		Seal Mat'l	Body Mat'l	Pipe Size	Orific	e Size	
NS	N\$71		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	10/50 20/50 24/50 DC DC	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	
Nominal Power ()(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)

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
Se	ries		Operating Mode	Hsg	Coil	Voltage	2	Seal Mat'l	Body Mat'l	Pipe Size	Orific	ce 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	10/50 20/50 24/50 DC DC	C: EPDM	7: 316 SS	J: 2"	J2: 1	. 1/4"

Coil Family				
Type Size				
All	S3			

Frequency (Hz)	60	50	
Nominal Dower ()(A)	Inrush	36	36
Norminal 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
Se	ries		Operating Mode	Hsg	Coil	Voltage		Seal Mat'l	Body Mat'l	Pipe Size	Orific	e Size
N	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	10/50 20/50 24/50 DC DC	C: EPDM	7: 316 SS	J: 2"	J2: 1	. 1/4"

Coil Family				
Type Size				
All	S3			

Frequency (Hz)	60	50	
Nominal Power ()(A)	Inrush	36	36
Norminal 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		Seal Mat'l	Body Mat'l	Pipe Size	Orific	ce 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	J: 2"	J7	: 2"

Coil Family			
Type Size			
All	S3		

Frequency (Hz)	60	50	
Nominal Power ()(A)	Inrush	36	36
Norminal 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		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	J: 2"	J7	: 2"

Coil Data

Coil Family			
Type Size			
All	S3		

Frequency (Hz)	60	50	
Nominal Dower ()(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)

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	201G4-NSF
NS201YF16FPDG4	KS201AF15G4-NSF	201G4-NSF
NS201YF16FPEG5	KS201AF15G5-NSF	201G5-NSF
NS201YF16F7CG4	KS201AF15G4-NSF	201G4-NSF
NS201YF16F7DG4	KS201AF15G4-NSF	201G4-NSF
NS201YF16F7EG5	KS201AF15G5-NSF	201G5-NSF

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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 k	201G4-NSF
NS201YF16FPEG5	KS201AF15G5-NSF k	201G5-NSF
NS201YF16F7CG4	KS201AF15G4-NSF	201G4-NSF
NS201YF16F7DG4	KS201AF15G4-NSF k	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.

- 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.



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

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

DESCRIPTION

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

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

OPERATION

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

SPECIFICATIONS

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

OPERATING TEMPERATURES

Ambient	Elastomer	Fluid
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.
- 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.



GC Valves, LLC. 456 Crompton St., Charlotte, NC 28241 Ph: 704-588-3300, Fx: 704-973-9526, <u>Service@gcvalves.com</u>
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 k	211G4-NSF
NS211YF24FPDG4	KS211AF02G4-NSF K	211G4-NSF
NS211YF24FPEG5	KS211AF02G5-NSF k	211G5-NSF
NS211YF02F7CG4	KS211AF02G4-NSF k	211G4-NSF
NS211YF02F7DG4	KS211AF02G4-NSF k	211G4-NSF
NS211YF02F7EG5	KS211AF02G5-NSF k	211G5-NSF
NS211YF24F7CG4	KS211AF02G4-NSF K	211G4-NSF
NS211YF24F7DG4	KS211AF02G4-NSF K	211G4-NSF
NS211YF24F7EG5	KS211AF02G5-NSF K	211G5-NSF

COIL CHART

Valve	Voltage	DIN Coil	Conduit Coil
NS211YF02FPCG4	120V 50/60	HS3YN02 H	63 GN02A24
NS211YF02FPDG4	120V 50/60	HS3YN02 H	63 GN02A24
NS211YF02FPEG5	120V 50/60	HS3YN02 H	63 GN02A24
NS211YF24FPCG4	24V 50/60	HS3YN24 H	63 GN24A24
NS211YF24FPDG4	24V 50/60	HS3YN24 H	63 GN24A24
NS211YF24FPEG5	24V 50/60	HS3YN24 HS	63 GN24A24
NS211YF02F7CG4	120V 50/60	HS3YN02 HS	63 GN02A24
NS211YF02F7DG4	120V 50/60	HS3YN02 H	63 GN02A24
NS211YF02F7EG5	120V 50/60	HS3YN02 HS	63 GN02A24
NS211YF24F7CG4	24V 50/60	HS3YN24 H	63 GN24A24
NS211YF24F7DG4	24V 50/60	HS3YN24 H	63 GN24A24
NS211YF24F7EG5	24V 50/60	HS3YN24 HS	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 .
- 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 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.
- 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° F Fluid 32° - 295° F (EPR) 32° - 295° F	Ambient
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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	K7 11G5-NSF
NS711C9FG9	KS711AF02G9-NSF	K7 11G9-NSF
NS711C9GJ2	KS711AF02J2-NSF	K711J2-NSF
NS711C9HJ5	KS711AF02J5-NSF	K711J5-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.

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

COIL CHART

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

Cleaning

Cleaning fluid must be compatible with all valve components.

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

WARNING

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

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

TROUBLE-SHOOTING

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

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

