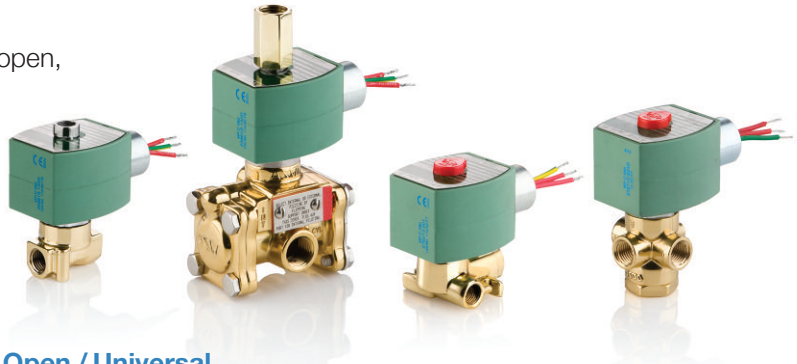


**Three-way (3/2) general service solenoid valves have three ports and two orifices. When one orifice is open, the other is closed.**

- Control of air, water, light oil, non-corrosive media
- Normally closed (pressure to cylinder port when energized) operation
- Normally open (cylinder port exhausts when energized) operation
- Universal (can function as normally closed, normally open, diverter of 1 fluid, or selector of 2 fluids) operation
- Size range of 1/8" to 1"



**General Service - 3/2 Normally Closed / Normally Open / Universal**

Pipe Size (in)	Orifice (in)	Cv Flow	Operating Pressure Differential (psi)				Max. Fluid Temp. °F	Valve Catalog Number	Body Material	Sealing Material	Voltage	Valve Order Code	Wattage	Approvals		Rebuild Kit Order Code	Replacement Coil Order Code	Approx. Shipping Weight (lbs.)
			Min.	Max.										UL	FM			
				Air	Water	Light Oil												
<b>3/2 Normally Closed</b>																		
1/8	3/64	0.06	0	200	200	200	180	8320G132	BR	NBR	120/60,110/50	20710	6.1	●	-	302120	238210-032-D*	2.1
		0.06	0	200	200	200	180	8320G132MS	BR	NBR	120/60,110/50	20900	6.1	●	-	302120-MS	238210-032-D*	2.1
		0.06	0	200	200	200	120	8320G132	BR	NBR	24/DC	21587	10.6	●	-	302216	238310-006-D*	2.1
	1/16	0.09	0	150	125	125	180	8320G013	BR	NBR	120/60,110/50	20674	6.1	●	-	302120	238210-032-D*	2.1
	3/32	0.12	0	100	100	100	180	8320G015	BR	NBR	120/60,110/50	20678	6.1	●	-	302120	238210-032-D*	2.1
<b>3/2 Normally Open</b>																		
1/8	3/64	0.06	0	200	200	200	180	8320G136	BR	NBR	120/60,110/50	20713	6.1	●	-	302156	238210-032-D*	2.1
		0.06	0	200	200	200	180	8320G136MS	BR	NBR	120/60,110/50	20903	6.1	●	-	302156-MS	238210-032-D*	2.1
	3/32	0.12	0	100	100	100	180	8320G029	BR	NBR	120/60,110/50	20687	6.1	●	-	302156	238210-032-D*	2.1
	3/16	0.35	0	250	250	250	200	8300G003G	BR	SS	120/60	21469	20.1	-	-	306680-G	272610-132-D*	3.0
<b>3/2 Universal</b>																		
1/8	3/64	0.06	0	175	175	175	140	8320G130	BR	NBR	120/60,110/50	20706	9.1	●	-	302084	238210-132-D*	2.1
		0.06	0	125	125	125	120	8320G130	BR	NBR	12/DC	20709	10.6	●	-	302190	238310-004-D*	2.1
	1/16	0.08	0	100	100	100	180	8320G001MS	BR	NBR	120/60,110/50	20662	9.1	●	-	302088-MS	238210-132-D*	2.1
		0.08	0	65	65	65	120	8320G001	BR	NBR	24/DC	20669	10.6	●	-	302191	238210-006-D*	2.1
		0.08	0	100	100	100	180	8320G001	BR	NBR	120/60,110/50	20661	9.1	●	-	302088	238210-132-D*	2.1
		0.08	0	100	100	100	180	8320G001	BR	NBR	24/60	21729	9.1	●	-	302088	238210-105-D*	2.1
		0.08	0	100	100	100	180	OPSP8320G001MS	BR	NBR	120/60,110/50	20666	9.1	●	-	302088-MS	238212-132-*	2.1
		0.08	0	100	100	100	180	8320G001	BR	NBR	120/60,110/50	20661	9.1	●	-	302088	238210-132-D*	2.1
	3/32	0.12	0	50	50	50	180	8320G083	BR	NBR	120/60,110/50	20697	6.1	●	-	302092	238210-032-D*	2.1
	1/8	0.21	0	30	30	30	180	8320G003	BR	NBR	120/60,110/50	20670	9.1	●	-	302096	238210-132-D*	2.1
0.21		0	30	30	30	180	8320G043	SS	NBR	120/60,110/50	20692	9.1	●	-	302098	238210-132-D*	2.1	

General Service - 3/2 Normally Closed / Normally Open 1/4"

Pipe Size (in)	Orifice (in)	Cv Flow	Operating Pressure Differential (psi)				Max. Fluid Temp. °F	Valve Catalog Number	Body Material	Sealing Material	Voltage	Valve Order Code	Wattage	Approvals		Rebuild Kit Order Code	Replacement Coil Order Code	Approx. Shipping Weight (lbs.)	
			Min.	Max.										UL	FM				
				Air	Water	Light Oil													
<b>3/2 Normally Closed</b>																			
1/4	1/16	0.09	0	210	225	225	200	8320G182	BR	NBR	120/60,110/50	20748	17.1	●	-	302141	238610-132-D*	2.5	
		0.09	0	210	225	225	200	EF8320G182	BR	NBR	120/60,110/50	20749	17.1	●	-	302141	238614-132-D*	2.5	
		0.09	0	160	160	160	150	EF8320G182	BR	NBR	24/DC	21259	11.6	●	-	302227	238714-006-D*	2.5	
		0.09	0	150	-	-	180	8320G701 ①	BR	NBR	120/60,110/50	21364	6.1	□	-	318814	238210-032-D*	2.5	
		0.09	0	160	160	160	150	8320G182	BR	NBR	24/DC	21862	11.6	●	-	302227	238710-004-D*	2.5	
		0.09	0	160	160	160	150	8320G182	BR	NBR	12/DC	21861	11.6	●	-	302227	238710-006-D*	2.5	
	3/32	1/8	0.12	0	100	-	-	180	8320G702 ①	BR	NBR	120/60,110/50	21883	6.1	□	-	318814	238210-032-D*	2.5
			0.12	0	150	-	-	200	8320G704 ①	BR	NBR	120/60,110/50	21365	10.1	□	-	318818	238610-032-D*	2.5
			0.12	0	150	-	-	200	EF8320G704 ①	BR	NBR	120/60,110/50	21575	10.1	●	-	318818	238614-032-D*	2.5
			0.12	0	150	150	150	200	8320G184	BR	NBR	120/60,110/50	20750	10.1	●	-	302142	238610-032-D*	2.5
			0.12	0	150	150	150	200	EF8320G184	BR	NBR	120/60,110/50	20753	10.1	●	-	302142	238614-032-D*	2.5
			0.12	0	150	150	150	200	8320G184MO	BR	NBR	120/60,110/50	21731	10.1	●	-	302142-MO	238610-032-D*	2.5
			0.12	0	150	150	150	200	8320G184MS	BR	NBR	120/60,110/50	21108	10.1	●	-	302142-MS	238610-032-D*	2.5
			0.12	0	150	150	150	200	EFHT8320G184	BR	NBR	120/60,110/50	20754	10.1	●	-	302142	238814-032-D*	2.5
			0.12	0	115	115	115	150	8320G184	BR	NBR	24/DC	20758	11.6	●	-	302227	238710-006-D*	2.5
			0.12	0	115	115	115	150	EF8320G184	BR	NBR	24/DC	20759	11.6	●	-	302227	238714-006-D*	2.5
			0.12	0	150	150	150	200	8320G202	SS	NBR	120/60,110/50	20941	10.1	●	-	312191	238610-032-D*	2.5
			0.12	0	150	150	150	200	EF8320G202	SS	NBR	120/60,110/50	20942	10.1	●	-	312191	238614-032-D*	2.5
		0.12	0	150	150	150	200	EFHT8320G202	SS	NBR	120/60,110/50	21870	10.1	●	-	312191	238814-032-D*	2.5	
		0.12	0	115	115	115	150	8320G202	SS	NBR	24/DC	21732	11.6	●	-	312192	238710-006-D*	2.5	
		0.12	0	115	115	115	150	EF8320G202	SS	NBR	24/DC	20949	11.6	●	-	312192	238714-006-D*	2.5	
		0.12	0	110	110	110	200	8320G089	BR	NBR	120/60,110/50	21730	9.1	●	-	302133	238210-132-D*	2.5	
		0.15	0	205	205	190	200	8314H035	BR	NBR	120/60,110/50	22109	10.1	●	-	323958	238610-032-D*	2.6	
		0.15	0	205	205	190	200	EF8314H035	BR	NBR	120/60,110/50	22115	10.1	●	-	323958	238614-032-D*	2.6	
	0.15	0	205	205	190	200	8314H121	SS	NBR	120/60,110/50	22113	10.1	●	-	323960	238610-032-D*	2.6		
	0.2	5	150	-	-	180	8317G023	BR	NBR	120/60,110/50	20650	10.1	●	-	302902	238610-032-D*	2.7		
	0.2	5	150	150	95	180	8317G035	BR	NBR	120/60,110/50	20652	10.1	●	-	314463	238610-032-D*	2.7		
	0.21	0	250	250	250	180	8300G058RF	BR	NBR	120/60	21474	20.1	-	-	306680-RF	272610-132-D*	4.5		
	1/8	11/64	0.25	0	85	85	85	200	8320G203	SS	NBR	120/60,110/50	20950	10.1	●	-	312191	238610-032-D*	2.5
			0.25	0	60	60	60	150	EF8320G203	SS	NBR	24/DC	21868	11.6	●	-	312192	238714-006-D*	2.5
0.25			0	145	145	100	200	8314H036	BR	NBR	120/60,110/50	22110	10.1	●	-	323958	238610-032-D*	2.6	
0.25			0	85	85	85	200	8320G186	BR	NBR	120/60,110/50	20760	10.1	●	-	302143	238610-032-D*	2.5	
0.25			0	85	85	85	200	EF8320G186	BR	NBR	120/60,110/50	20761	10.1	●	-	302143	238614-032-D*	2.5	
0.25			0	85	85	85	200	EFHT8320G186	BR	NBR	120/60,110/50	21775	10.1	●	-	302143	238814-032-D*	2.5	
9/32	3/32	0.25	0	85	85	85	200	EF8320G203	SS	NBR	120/60,110/50	20951	10.1	●	-	312191	238614-032-D*	2.5	
		0.35	0	45	45	45	200	EF8320G188	BR	NBR	120/60,110/50	20765	10.1	●	-	302144	238614-032-D*	2.5	
		0.35	0	45	45	45	200	8320G188	BR	NBR	120/60,110/50	20764	10.1	●	-	302144	238610-032-D*	2.5	
		0.8	10	200	200	200	180	8321G001	BR	NBR	120/60,110/50	20778	6.1	●	-	302925	238210-032-D*	3.8	
1/4	9/32	0.8	10	200	200	200	180	EF8321G001	BR	NBR	120/60,110/50	20779	6.1	●	-	302925	238214-032-D*	3.8	
		0.8	10	200	200	200	120	8321G001	BR	NBR	24/DC	21381	10.6	●	-	302929	238310-006-D*	3.8	
		0.8	10	200	200	200	120	EF8321G001	BR	NBR	24/DC	20783	10.6	●	-	302929	238314-006-D*	3.8	
		0.2	5	150	150	95	180	EF8317G035	BR	NBR	120/60,110/50	20653	10.1	●	-	314463	238614-032-D*	2.7	
1/4	9/32	0.2	5	75	55	30	104	EF8317G035	BR	NBR	24/DC	20656	11.6	●	-	314466	238714-006-D*	2.7	
		0.2	5	150	150	95	180	EF8317G036	SS	NBR	120/60,110/50	20657	10.1	●	-	314469	238614-032-D*	2.7	
		0.39	0	150	150	150	180	EF8300G081RF	BR	NBR	120/60	21506	20.1	●	-	306681-RF	272614-132-D*	4.5	
1/4	9/32	0.45	0	190	190	190	200	8300G081F	BR	SS	120/60	21459	20.1	-	-	306681-F	272610-132-D*	4.5	
		0.45	0	250	250	250	200	8300D061F	BR	SS	120/60	01198	28.0	-	-	306682-F	222345-005-D*	4.5	
<b>3/2 Normally Open</b>																			
1/4	1/16	0.08	0	250	250	250	200	EF8320G192	BR	NBR	120/60,110/50	20768	7.1	●	-	302183	238614-132-D*	2.5	
		0.09	0	250	250	250	200	8320G192	BR	NBR	120/60,110/50	20767	17.1	●	-	302183	238610-132-D*	2.5	
		0.09	0	250	250	250	200	8320G192MS	BR	NBR	120/60,110/50	21110	17.1	●	-	302183-MS	238610-132-D*	2.5	
	3/32	0.12	0	150	140	140	200	8320G194	BR	NBR	120/60,110/50	20770	10.1	●	-	302184	238610-032-D*	2.5	
		0.12	0	150	140	140	200	EF8320G194	BR	NBR	120/60,110/50	21752	10.1	●	-	302184	238614-032-D*	2.5	
	3/32	0.15	0	175	175	175	200	8314H053	BR	NBR	120/60,110/50	22112	10.1	●	-	323970	238610-032-D*	2.6	
	9/32	0.8	10	200	200	200	180	8321G003	BR	NBR	120/60,110/50	20791	6.1	●	-	302927	238210-032-D*	3.8	

① NAMUR direct mount construction.

### Din Connectors

Description	Orientation	Rotatable	Order Code
<b>Size 11 mm, Form B</b>			
1/2" conduit	Ground Down	180°	290413-001
PG 9 cable gland ①	Ground Down	180°	290414-001
<b>Size 18 mm, Form A</b>			
1/2" conduit	Ground Down	90°	290410-001
PG 11 cable gland	Ground Down	90°	290411-001
6' leads with North American outlet plug	Ground Up	-	272852
PG 11 cable gland for ASCO Timer Drain Valve	Ground Up	90°	272873



① Available in 10 pack as order code 226061-001-\*

### Electronic Timer

Supply Voltage	Max. Current Consumption	Max. Ambient Temp. °F	Switch Capacity	Inrush Current Capacity	Repeat Accuracy	Scale Accuracy	Adjustable On Time	Adjustable Off Time	Catalog Number and Order Code
24-240V AC/DC 50/60 Hz	4 mA	122	1 Amp	10 Amps for 10 mSec	+/- 0.1%	+/- 10%	2 - 40 Sec	30 Sec to 45 Min	272839-001



### Muffler

Pipe Size (in)	Body Material	Catalog Number and Order Code
1/8	BR	264645-001
1/4	BR	264645-002



### Prefix/Suffix Definitions

Prefix	
D	Shielded Core Design
EF	Explosionproof Enclosure
EV	Explosionproof Enclosure in Stainless Steel
HB	High Temperature Leaded Coil, Class H
HC	Battery Charging Circuits (125 or 250 DC), Class H
HT	High Temperature Leaded Coil, Class H
IS	Intrinsically Safe
J	Wiring Box
JB	Wiring Box with Leads
KF	Screw Terminals, Class F
OF	Open Frame Enclosure
P	Panel Mount
SC	DIN Enclosure (ISO 4400/DIN 43650), Class F (Class H High Temperature for 2, 11, 11.9, 17, and 22.9 watts)
SD	DIN Enclosure (ISO 4400/DIN 43650), Class F
SF	Spade Coil, Class F
SM	Spade Coil, Class B
SP	Spade Enclosure, Class F
SU	DIN Enclosure (ISO 4400/DIN 43650), High Temperature, Class H
U	Open Frame Enclosure
WB	Thermoplastic Encapsulated Watertight Junction Box
WT	Watertight Enclosure
X	Special Construction, varies with TPL number

Suffix	
B	LP Gas Service
C	Position Indication Switch
E	Ethylene Propylene (EPDM)
F	Valve Operation Type (Normally Closed)
HW	Hot Water Construction
L	Metal Seat
LT	Low Temperature Construction
M	Metered Flow Control
MO	Manual Operator, Momentary
MS	Manual Operator, Screw Type
N	Oxygen Service
P	Dry Gas, Non-Lubricated Air
Q	Long Life, Quiet Design
R	Resilient Seating
T	Polytetrafluorethylene (PTFE)
U	Valve Operation Type (Universal)
V	Fluorocarbon (FKM)
VH	Vacuum (High) Construction
VI	Visual Indicator
VM	Vacuum Service (Medium)

## Coil Specifications

Maximum Ambient Temperature Ratings for ASCO Coils ①					
Wattage ③	UL Approved Class F Temp. °F	Design Limit Class F Temp. °F	UL Approved Class H Temp. °F	Design Limit Class H Temp. °F	UL Approved and Design Limit Type 7 & 9 Temp. °F ②
0.5	-	-	-	158	-
0.65	-	-	-	77	-
1.6	122	122	-	-	-
2.0	-	-	-	158	-
2.5	140	140	-	-	-
3.0	125	125	-	-	-
5.9	125	125	-	-	-
6.0	-	-	125	125	-
6.1	125 ④	245	140	284	140
6.3	135	135	-	-	104
6.5	104	104	-	-	-
6.9	77	77	131 ④	131 ④	104
9.1	125 ④	173	-	-	-
10.0	140	140	-	-	-
10.1	125 ④	245	140	284	140
11.2	140	140	-	-	-
10.6	125	125	131 ④	131 ④	104
11.6	104	104	131 ④	131 ④	104
12.0	131	131	-	-	104
12.1	-	125	-	-	-
13.8	-	125	-	140	-
14.9	77	77	104	104	-
15.4	77	171	104	213	104
16.1	-	-	140	284	140
16.7	104	104	104	104	104
17.1	131 ④	245	-	212	140
20.0	77	125	-	-	104
20.1	-	173	-	212	140
22.6	104	104	131 ④	131 ④	-
24.6	-	-	104	104	104
28.0	-	-	-	-	104
28.2	125	125	-	-	-
30.6	-	-	77	-	104

① Temperature ratings based on fluids at standard temperature.  
 ② 104°F for Zone G.  
 ③ For information on 0.44 and 1.4 watt valves please see Catalog 35.  
 ④ 131°F for 8262H, 8263H, and 8314H series only.

## Abbreviations and Symbols

Abbreviation Descriptions	
AL	Aluminum
BR	Brass
BZ	Bronze
CA	Acetal, Celcon, Delrin
EPDM	Ethylene Propylene
FKM	Fluorocarbon Elastomer
GP	General Purpose (Enclosure Type)
LED	Light Emitting Diode
NBR	Nitrile Butylene
NC	Normally Closed (Operation Type)
NO	Normally Open (Operation Type)
NPBR	Nickel Plated Brass
OF	Open Frame (Enclosure Type)
PA	Poly Amide
PA+FV	Glass Filled Poly Amide
PBT	Polybutylene Terephthalate
PC	Polycarbonate
PE	Polyethylene
PEEK	Polyetheretherketone
PL	Plastic
PTFE	Polytetrafluoroethylene
POM	Poly Oxymethylene
SPDT	Single Pole Double Throw (Mechanical Switch Type)
SS	Stainless Steel
U	Universal (Operation Type)
UNF	Unified National Fine (Thread type)
UR	Urethane
VDR	Varistor for Surge Suppression
WT	Watertight (Enclosure Type)
ZN	Zinc
○	Safety Shutoff
●	General Service
□	Recognized Solenoid

## General Information on Elastomer Materials Frequently Used

### NBR (Buna “N”, Nitrile)

NBR is commonly referred to as a nitrile rubber and is the standard synthetic elastomer for accomplishing resilient-type seating or sealing in ASCO valves. It has excellent compatibility for most air, water, and light oil applications. It has a useful temperature range of 0°F to 180°F (-18°C to 82°C).

### EPDM (Ethylene Propylene)

EPDM is selected for applications above the NBR temperature range, such as handling hot water and steam. Ethylene propylene has an extremely wide range of fluid compatibility, but has the distinct disadvantage that it cannot be used with petroleum-based fluids or contaminated fluids (such as lubricated air). It has a useful temperature range of -10°F to 300°F (-23°C to 149°C).

### FKM

FKM is a fluorocarbon elastomer primarily developed for handling such hydrocarbons as jet fuels, gasolines, solvents, etc., which normally cause detrimental swelling to NBR. FKM has a high temperature range similar to EPDM, but with the advantage of being somewhat more resistant to “dry heat.” FKM has a wide range of chemical compatibility. It has a useful temperature range of 0°F to 350°F (-18°C to 177°C).

### PTFE

PTFE, and PTFE with fillers are considered more a plastic than a resilient-type material. They are virtually unattacked by any fluid. Their temperature usage has ranged from discs for cryogenic valves to discs for steam valves. They are not easily fabricated and are known to have “cold flow” characteristics which may contribute to objectionable leakage, particularly on gases.