



# SOLENOID VALVES

In Nema 4 and Nema 7



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# SV Direct Solenoids

## Description

Based on NAMUR standard (32×24), the S4 Series AIR-CON NAMUR solenoid valve functions as 5/2 or 3/2NC and is available for the operation of double-acting and spring-return pneumatic actuators. Working pressure from 30 to 120 psi and the working voltage from 12~48 VDC, 110~240 VAC.



*With LED light*

## TECHNICAL DATA

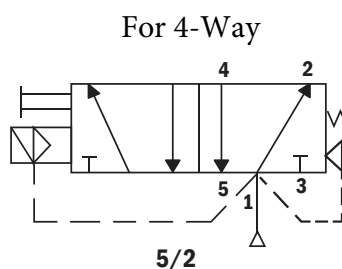
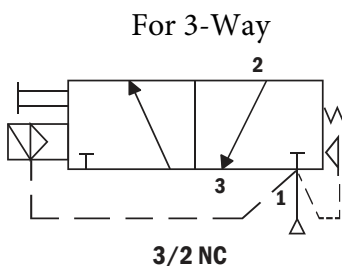
<b>Spool Valve/ Body</b>	Extruded Aluminum
<b>Coating</b>	Anodized Coated
<b>Air Port</b>	1/4" NPT
<b>CV</b>	1.4 (25 mm <sup>2</sup> )
<b>Installation and Connection</b>	24x32 Namur, Manual Override On Body
<b>Medium Temperature*</b>	20 °F ~ 175 °F
<b>Working Pressure</b>	30 ~ 120 psi
<b>Working Medium</b>	Less Than 40µm Filtered and Dried Air
<b>Working Life</b>	More Than 1,000,000 Cycle (On The Normal Working Comdition)

## SOLENOID COIL

<b>Insulation</b>	F Class (H Class On Requiring)
<b>Voltage Tolerance</b>	±10%
<b>Insulated Voltage</b>	
<b>Duty Cycle</b>	100% Continuous
<b>Weather Proof</b>	IP66
<b>Operating Temp.*</b>	-5°F ~ 175°F

## MODEL CHOICE

Model	Type	Voltage	Power Consumption	Wiring Connector	Cable Size
S3-12A	3-WAY Conduit Single Solenoid NAMUR Valve	120VAC	4.5VA	1/2"NPT	/
S3-24D		24VDC	4W		
S3-12D		12VDC	4W		
S3-22A		220VAC	5VA		
S3-24A		24VAC	4.5VA		
S4-12A	4-WAY Conduit Single Solenoid NAMUR Valve	120VAC	4.5VA	1/2"NPT	/
S4-24D		24VDC	4W		
S4-12D		12VDC	4W		
S4-22A		220VAC	5VA		
S4-24A		24VAC	4.5VA		
S3ND120	3-WAY Conduit Single Solenoid NAMUR Valve	120VAC	4.5VA	DIN PLUG	Dia.6-8mm
S3ND24		24VDC	4W		
S3ND12		12VDC	4W		
S3ND220		220VAC	5VA		
S3ND120		24VAC	4.5VA		
S4ND120	4-WAY Conduit Single Solenoid NAMUR Valve	120VAC	4.5VA	DIN PLUG	Dia.6-8mm
S4ND24V		24VDC	4W		
S4ND12		12VDC	4W		
S4ND220		220VAC	5VA		
S4ND24V		24VAC	4.5VA		



## Description

- Based on NAMUR standard (32×24), the AIR-CON NAMUR solenoid valve can be adapted for 3/2 NC or 5/2 functions for controlling double-acting and single-acting pneumatic actuators. It is excellent for being used in hazardous area (Ex ia IIC T6). Working pressure from 30 to 120 psi and the working voltage is 24 VDC.



- Based on NAMUR standard (32×24), the AIR-CON NAMUR solenoid valve can be adapted for 3/2 NC or 5/2 functions for controlling double-acting and single-acting pneumatic actuators. It is excellent for being used in hazardous area (Ex ia IIB T6 Ga). Working pressure from 30 to 120 psi and the working voltage is 24 VDC.



## TECHNICAL DATA

<b>Spool Valve/ Body</b>	Extruded Aluminum
<b>Coating</b>	Anodized Coated
<b>Air Port</b>	1/4" NPT
<b>CV</b>	1.1.(19.63 mm <sup>2</sup> )
<b>Installation and Connection</b>	24x32 Namur, Manual Override On Body
<b>Medium Temperature*</b>	-5°F ~ 175°F
<b>Working Pressure</b>	30 ~ 120 psi
<b>Working Medium</b>	Less Than 40µm Filtered and Dried Air
<b>Working Life</b>	More Than 1,000,000 Cycle (On The Normal Working Comdition)

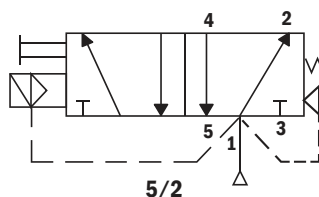
### SOLENOID COIL (C3)

<b>Insulation</b>	F Class
<b>Voltage Tolerance</b>	±10%
<b>Insulated Voltage</b>	1000 V
<b>Duty Cycle</b>	100% Continuous
<b>Weather Proof</b>	IP64
<b>Area Classification</b>	Ex ia IIC T6
<b>Operating Temp.*</b>	15°F ~ 120°F

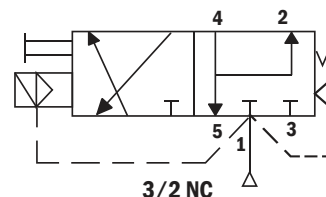
### SOLENOID COIL (C7)

<b>Insulation</b>	H Class
<b>Voltage Tolerance</b>	±10%
<b>Coil Enclosure</b>	Die-casting Aluminum +Epoxy Coated
<b>Insulated Voltage</b>	1000 V
<b>Duty Cycle</b>	100% Continuous
<b>Weather Proof</b>	IP67
<b>Area Classification</b>	Ex ia IIB T6 Ga (Class 1 Zone 0 AEx ia IIB T6 Ga)
<b>Operating Temp.*</b>	15°F ~ 120°F

## MODEL CHOICE



For 4-Way



For 3-Way

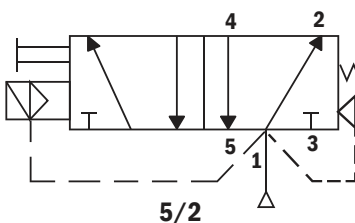
Model	Type	Voltage	Power Consumption	Wiring Connector	Cable Size
C/F	3-Way or 4-Way Conduit Explosion Proof Solenoid NAMUR Valve	24VDC	0.7W	DIN PLUG	Dia.3-5.5mm
C/F	3-Way or 4-Way Conduit Explosion Proof Solenoid NAMUR Valve	24VDC	0.98W	1/2" NPT	/

## Description

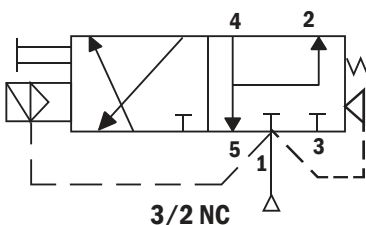
- Based on NAMUR standard (32×24), the AIR-CON solenoid valve can be adapted for 3/2 NC or 5/2 functions for controlling double-acting and single-acting pneumatic actuators. Working pressure from 30 to 120 psi and the working voltage from 24VDC, 110/220 VAC.



For 4-Way



### For 3-Way

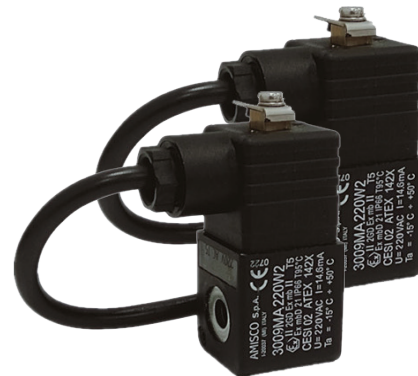


## TECHNICAL DATA

<b>Spool Valve/ Body</b>	Extruded Aluminum
<b>Coating</b>	Anodized Coated
<b>Air Port</b>	1/4" NPT
<b>CV</b>	1.1.(19.63 mm <sup>2</sup> )
<b>Installation and Connection</b>	24x32 Namur, Manual Override On Body
<b>Medium Temperature*</b>	-5°F ~ 175°F
<b>Working Pressure</b>	30 ~ 120 psi
<b>Working Medium</b>	Less Than 40μm Filtered and Dried Air
<b>Working Life</b>	More Than 1,000,000 Cycle (On The Normal Working Comdition)

## SOLENOID COIL

<b>Insulation</b>	H Class
<b>Voltage Tolerance</b>	±10%
<b>Insulated Voltage</b>	1000 V
<b>Duty Cycle</b>	100% Continuous
<b>Weather Proof</b>	IP66
<b>Area Classification</b>	Ex mb II T4 or T5
<b>Operating Temp.*</b>	-15 °F ~ 150 °F



## MODEL CHOICE

Model	Type	Voltage	Power Consumption	Wiring Connector	Cable Size
C/F	3-Way or 4-Way Conduit Explosion Proof Solenoid NAMUR Valve	24VDC	3W	1.2m Cable Connection	Dia.6-7mm
		110VAC	4VA		Dia.6-7mm
		220VAC	4VA		Dia.6-7mm



## Description

- Based on NAMUR standard, the AIR-CON NAMUR solenoid valve can be adapted for 3/2 NC or 5/2 functions for controlling double-acting and single-acting pneumatic actuators. The C1/C2 coil working pressure from 30 to 120 psi. The C1 coil working voltage from 24VDC, 110/220VAC. The C2 coil working voltage is 24VDC.



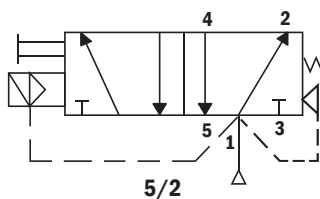
Coil

- Based on NAMUR standard (32×24), the AIR-CON NAMUR solenoid valve functions as 5/2 or 3/2NC and is available for the operation of double-acting and spring-return pneumatic actuators which located in hazardous (Ex d IIC T6 Gb) area. Working pressure from 2 bar to 8 bar and the working voltage from 12-48VDC, 110-240VAC.

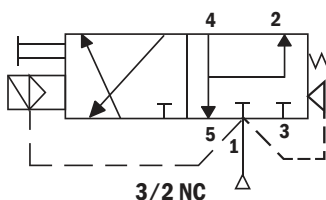
CE Ex ATEX IP67 NEMA 4,4X



For 4-Way



For 3-Way



## TECHNICAL DATA

Spool Valve/ Body	Extruded Aluminum
Coating	Anodized Coated
Air Port	1/4" NPT
CV	1.1.(19.63 mm <sup>2</sup> )
Installation and Connection	24x32 Namur, Manual Override On Body
Medium Temperature*	-5°F ~ 175 °F
Working Pressure	30 ~ 120 psi
Working Medium	Less Than 40µm Filtered and Dried Air
Working Life	More Than 1,000,000 Cycle (On The Normal Working Condition)

## SOLENOID COIL (C1/C2)

Insulation	F Class
Voltage Tolerance	±10%
Insulated Voltage	1000 V
Duty Cycle	100% Continuous
Weather Proof	IP64
Operating Temp.*	15°F ~ 120 °F

## SOLENOID COIL (C5)

Insulation	F Class (H Class On Requiring)
Voltage Tolerance	±10%
Coil Enclosure	Die-casting Aluminum +Epoxy Coated
Insulated Voltage	1000 V
Duty Cycle	100% Continuous
Weather Proof	IP67
Area Classification	Ex d IIC T6 Gb (Class 1 Zone 1 AEx d IIC T6 Gb)
Operating Temp.*	-5°F ~ 140 °F

## MODEL CHOICE

Model	Type	Voltage	Power Consumption	Wiring Connector	Cable Size
C/F	3-Way or 4-Way Conduit Solenoid NAMUR Valve	24VDC	2.5W	DIN PLUG	Dia.3-5.5mm
		110VAC	2.8VA		
		220VAV	2.8VA		
C/F		24VDC	1W		
C/F	3-Way or 4-Way Conduit Explosion Proof Solenoid NAMUR Valve	12VDC	3.5W	1/2"NPT	/
		24VDC	3.5W		
		48VDC	3.5W		
		110VAC	4VA		
		210VAC	4VA		
		220VAC	4VA		
		240VAC	4VA		

TECHNICAL DATA

Spool Valve/ Body	SS316 Stainless Steel
Coating	Electropolishing
Air Port	1/4" NPT
CV	1.1.(19.63 mm²)
Installation and Connection	24x32 Namur, Manual Override On Body
Medium Temperature*	-5 °F ~ 175 °F
Working Pressure	30 ~ 120 psi
Working Medium	Less Than 40µm Filtered and Dried Air
Working Life	More Than 1,000,000 Cycle (On The Normal Working Comdition)

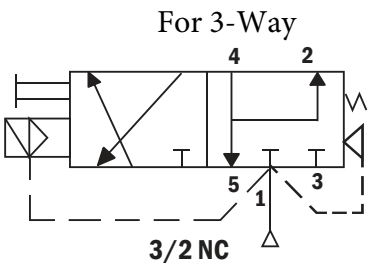
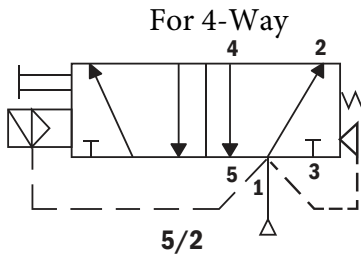
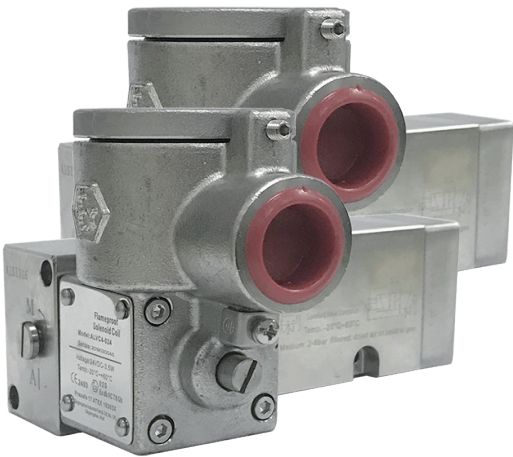
Description

► Based on NAMUR standard (32×24), the AIR-CON NAMUR solenoid valve can be adapted for 3/2 NC or 5/2 functions for controlling double-acting and spring-return pneumatic actuators. Armed with stainless steel enclosure coilthis solenoid valve,it is excellent for being used in hazardous area. Working pressure from 30 to 120psi and the working voltage from 12~48 VDC, 110~240 VAC.

SL

SOLENOID COIL

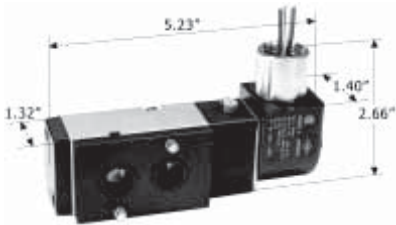
Insulation	F Class (H Class On Requiring)
Voltage Tolerance	±10%
Insulated Voltage	1000 V
Duty Cycle	100% Continuous
Weather Proof	IP67
Area Classification	Ex d IIC T6 Gb
Operating Temp.*	-5 °F ~ 140°F



MODEL CHOICE

Model	Type	Voltage	Power Consumption	Wiring Connector	Cable Size
C/F	3-Way or 4-Way Conduit Explosion Proof Solenoid NAMUR Valve	12VDC	3.5W	1/2" NPT	/
		24VDC	3.5W		
		48VDC	3.5W		
C/F	3-Way or 4-Way Conduit Explosion Proof Solenoid NAMUR Valve	110VAC	4VA	1/2" NPT	/
		210VAC	4VA		
		220VAC	4VA		
		240VAC	4VA		

3-Way Explosion Proof Single Solenoid NAMUR Valve

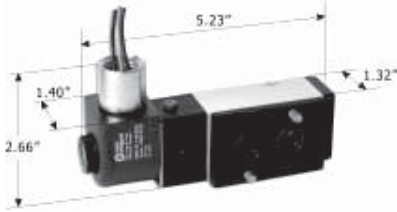


- Cv = 1.68
- Ports = 1/4" NPT
- Duty Cycle = 100% Continuous

- Power Consumption = 4.6 watts
- Pressure Range = 20 to 120 psig
- Temperature Range = 35° to 130° F

Model	Voltage	Inrush
S3X-12A	120VAC	62mA
S3X-24D	24VDC	108mA
S3X-12D	12VDC	204mA
S3X-22A	220VAC	31mA

4-Way Explosion Proof Single Solenoid NAMUR Valve



- Cv = 1.68
- Ports = 1/4" NPT
- Duty Cycle = 100% Continuous

- Power Consumption = 4.6 watts
- Pressure Range = 20 to 120 psig
- Temperature Range = 35° to 130° F

Model	Voltage	Inrush
S4X-12A	120VAC	62mA
S4X-24D	24VDC	108mA
S4X-12D	12VDC	204mA
S4X-22A	220VAC	31mA

OTHER OPTIONS

Description

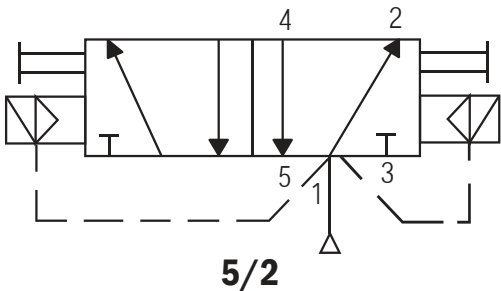
The AIR-CON NAMUR mount solenoid valve is a cost effective dual coil solenoid valve. These solenoid valves are offered as dual coil IP65 (C0A), dual coil explosion proof (C0E).



Explosion Proof



Ordinary Locations



# Dual Coil Solenoid Valves for Special Applications

## ► OPEN CENTERS

The 30E open centers solenoid valve is a specially designed solenoid valve made for double acting actuators in three position applications.

## ► CLOSED CENTERS

The 30C closed centers solenoid valve is a specially designed solenoid valve made for spring return actuators in three position applications. During the mid position, the air is trapped inside the solenoid valve, keeping the springs from decompressing and keeping the actuator open or in a semi-open position.

## ► LIGHTED DIN CONNECTORS

Lighted DIN connectors offer clear housings, two poles with ground, 1/2" NPT or conduit connections. These DIN connectors allow for easy verification if the solenoid coil is energized or deenergized. Each lighted DIN connector is available with flying leads which allow for easy wiring.

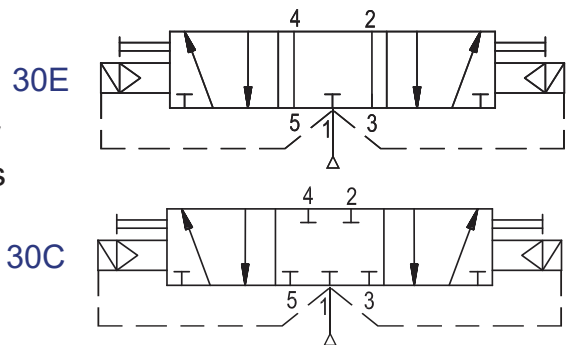
## ► SPEED CONTROLS

Air-con offers NPT brass and stainless steel speed control mufflers for solenoid valves. These are needed for exhaust ports on solenoid valves to control the opening and closing speed of the valve assembly.



## ► MUFFLERS

Air-con offers NPT brass and stainless steel speed control mufflers for solenoid valves. These are needed to help reduce the noise of exhausting air when a solenoid valve actuates. These can also be installed in the exhaust port of an actuator for spring return applications.



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