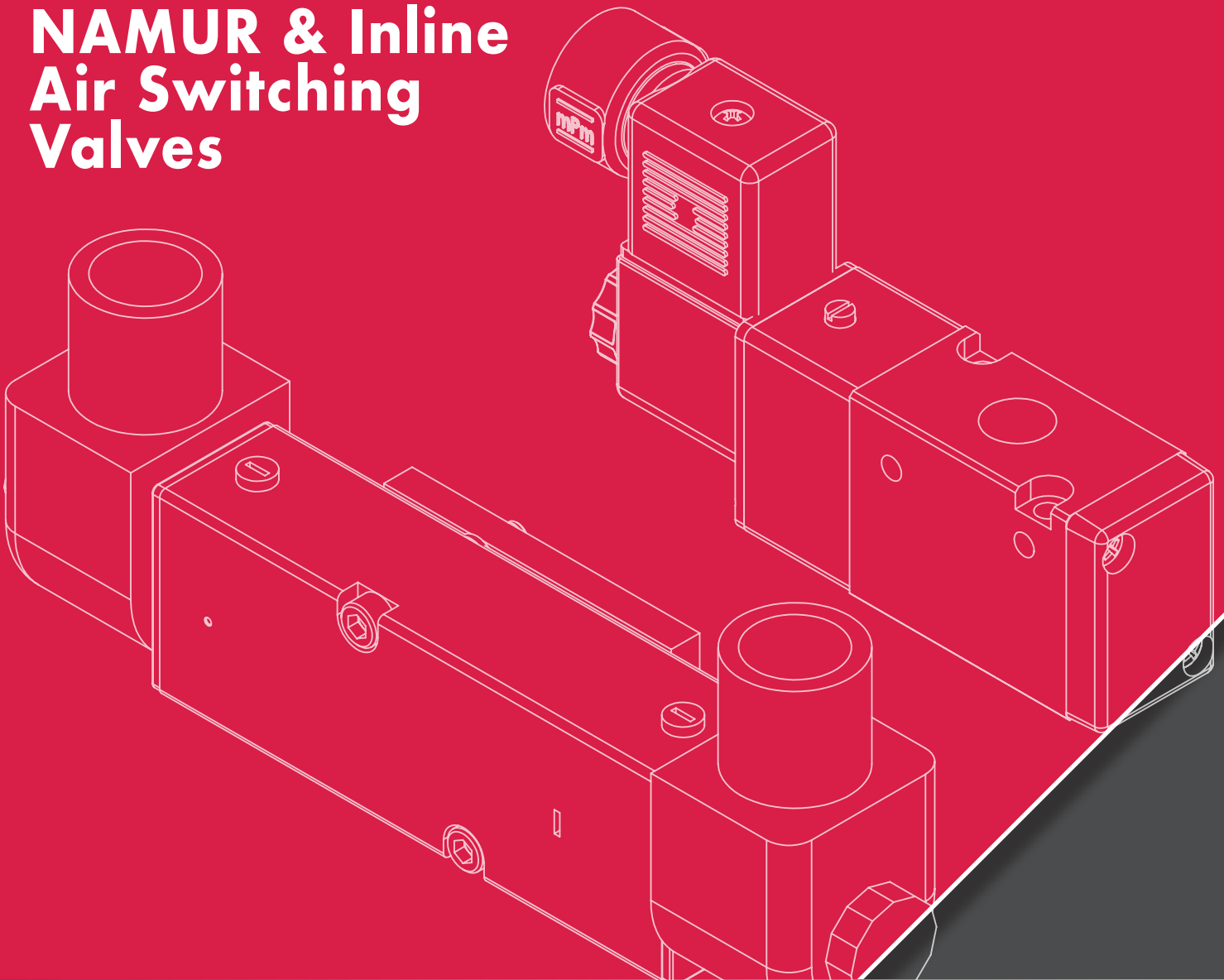


Max-Air

TECHNOLOGY

The Best Way To Automate Your Process

NAMUR & Inline Air Switching Valves

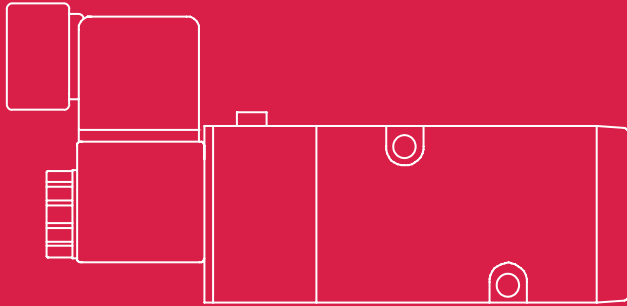


Solenoid Valve Technical Brochure

Max-Air Technology Inc. | Rotary Actuators & Valve Automation Solutions

Solenoid Valves

Standard & hazardous duty NAMUR or inline solenoid valves available in a variety of voltages and configurations.



The Max-Air NAMUR series solenoid valve features an electroless nickel plated spool, easy-to-use manual override (lockable), and is field convertible for use on either double acting (4 way) or spring return (3 way) actuators.

Solenoid Valve Part Number Builder

A	B	C	D	E	F	G	H
A - SERIES SV = 2 Pos, 1/4" NAMUR Alum. Body, Single/Dual Coils NV = 2 Pos, 1/4" NPT Inline Alum. Body, Single/Dual Coils 2NV = 2 Pos, 1/2" NPT Inline Alum. Body, Single/Dual Coils SSV = 2 Pos, 1/4" NAMUR SS Body, Single Coil Only S3 = 3 Pos, 1/4" NAMUR Alum. Body, Dual Coils Only EV = 2 Pos, 1/4" Gas, Namur Alum. Body, Single/Dual Coils	B - MODEL 6 = Standard IP65, Ind. Form Coil 7 = Intrinsically Safe, Form A Coil, 24VDC Only 9 = Exp. Proof, Class H Coil w/ 1/2" NPT & Leads H6 = High Temp, IP65, Class H Form A Coil (SV Series Only)	C - OPERATOR 1 = Left Pilot, Normal Closed, Single Coil 2 = Dual Pilots, Fail in Place, Dual Coils 3 = Right Pilot, Normal Closed, Single Coil (SV, NV, 2NV Series Only) A = Dual Pilots, Fail to Open Centers, Dual Coils C = Dual Pilots, Fail to Closed Centers, Dual Coils (S3 Series Only)	D - COIL OPTION (OMIT) = Standard CSA/UL Coil (Std.) L = Asi 2.5W Low Power Level 3 (Model 6 Only) A = ATEX Approved Coil	E - VOLTAGE* 12D = 12V DC 24D = 24V DC 24A = 24V AC 48D = 48V DC 120A = 120V AC 125D = 125V DC 220A = 220V AC 240D = 240V DC	F - BODY TYPE/SPACER PLATE 3 = 3-Way Body, No Spacers 5 = 4-Way Body, No Spacers T3 = 3-Way Polymer Spacer T5 = 4-Way Polymer Spacer TT = 3 & 4 Way Polymer Spacers A3 = 3-Way Alum. Spacer A5 = 4-Way Alum. Spacer AA = 3 & 4 Way Alum. Spacers (SV, SSV, S3 Series Only)	G - SEALS S = BUNA Seals (Std. for Models 6, 6H, 7, 9)	H - CONNECTOR 00 = None Model 6 Only: TD = Ind. Form, 1/2" NPT (Std.), TG = Ind. Form, 1/2" NPT w/ Grommet, 61 = Molded Lead, Ind. Form, 1M Leads, 63 = Molded Lead, Ind. Form, 3M Leads Model 9 Only: F1 = 1/2" NPT Connection w/ 1M Flying Leads (Std.) Models H6, 7, L7 Only: A1 = Form A, 3/8" NPT w/ Grommet (Std.), A2 = Form A, 1/2" NPT w/ Grommet, 71 = Molded Lead, Form A, 1M Leads Models 6 Only: L1 = 12V AC/DC LED Ind. Form, 1/2" NPT, L2 = 24V AC/DC LED Ind. Form, 1/2" NPT, L3 = 120V AC/DC LED Ind. Form, 1/2" NPT, L4 = 220V AC/DC LED Ind. Form, 1/2" NPT, M2 = 24V AC/DC Molded LED, Ind. Form, 1M Leads, M3 = 120V AC/DC Molded LED, Ind. Form, 1M Leads, N2 = 24V AC/DC Molded LED, Ind. Form, 2M Leads, N3 = 120V AC/DC Molded LED, Ind. Form, 2M Leads, V1 = P&F VMB-2+P/Z2-0.6M-PUR-V1-W, Ind. Form, W6 = IP67 Kit, 12 = M12, Ind. Form

VOLTAGE GUIDE TABLE

Model	12D	24D	24A	48D	120A	125D	220A	240D
6	YES	YES	YES	YES	YES	YES	YES	
7		YES						
9	YES	YES	YES		YES	YES	YES	YES
H6		YES			YES		YES	

MODELS	CODE	TEMP RANGE
Models 6/7	Standard Temp	-4°F to 122°F [-20°C to 50°C]
Model H6	High Temp	0°F to 158°F [-18°C to 70°C]
Model 9	Standard Temp	0°F to 140°F [-18°C to 60°C]



Table of Contents

Pg - Description

[02 - Part Number Builder](#)

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[07 - Coil Data](#)

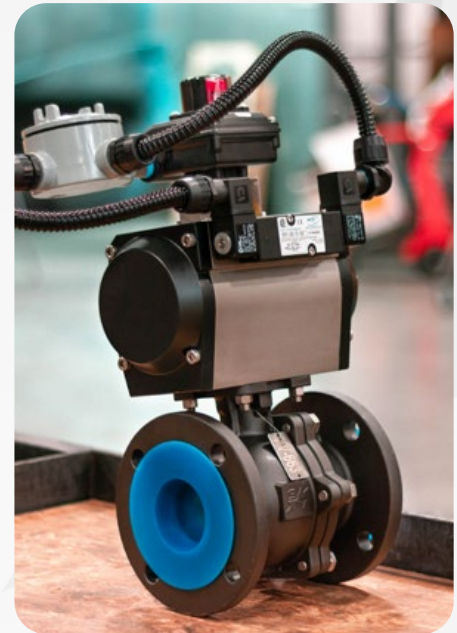
[08 - SV Series Technical Data](#)

[12 - NV Series Technical Data](#)

[26 - SSV Series Technical Data](#)

[30 - S3 Series Technical Data](#)

[34 - Wiring Diagrams](#)



STANDARD WARRANTY

Max-Air Technology Inc. | The Best Way to Automate Your Process

Max-Air Technology provides the following warranty regarding products manufactured by it. **THE WARRANTY STATED HEREIN IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESSED OR IMPLIED, OR STATUTORY, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.** Max-Air Technology warrants its products to be free from defects in materials and workmanship when these products are used for the purpose for which they were designed and manufactured. Max-Air Technology does not warrant its products against chemical or stress corrosion or against any other failure other than from defects in materials or workmanship. The warranty period is for twelve (12) months from installation date or eighteen (18) months from shipment date, whichever date comes first. Any claims regarding this warranty must be in writing and received by Max-Air Technology before the last effective date of the warranty period. Upon Max-Air Technology's receipt of a warranty claim, Max-Air Technology reserves the right to inspect the product(s) in question at either the field location or at the Max-Air Technology Manufacturing plant. If, after inspection of the product(s) in question, Max-Air Technology determines that the purchaser's claim is covered by this warranty, Max-Air Technology's sole liability and the purchaser's sole remedy under this warranty is limited to the refunding of the purchase price or repair or replacement thereof at Max-Air Technology option. Max-Air Technology will not be liable for any repairs, labor, material or other expenses that are not specifically authorized in writing by Max-Air Technology, and in no event shall Max-Air Technology be liable for any direct or consequential damages arising out of any defect from any cause whatsoever. If any Max-Air Technology product is modified or altered at any location other than Max-Air Technology – St. Louis (Missouri) UNITED STATES or Max-Air Technology – Agrate Brianza (MB) ITALY without the express written authorization of Max-Air Technology, said product is not covered by this warranty. The warranty for such products shall be subject only to the warranty relief, if any, provided by the suppliers and/or manufacturers of such products.

Features & Benefits

Electrically signaled air switching valves w/ NAMUR interface or inline NPT ports, for air actuators.

CSA Approved, Air Directional Valves.

Max-Air Technology's solenoid valves are CSA approved, built, tested and made to order in the USA. Our SV NAMUR mount and NV inline series feature a modular design with extensive coil and connector options, pilot configurations, and seal materials. Stainless steel bodies are also available in the SSV series.

Standard Features:

- Direct mount compatible with any Max-Air rack & pinion actuator (or any actuator with 1/4" NAMUR pattern)
- Multiple voltages available (AC/DC)
- Water and dust proof according to IP65, IP67 available
- Standard duty, intrinsically safe & explosion proof models
- Suitable for use with other Max-Air NAMUR speed controls
- Standard lockable manual override button



SV Series NAMUR
Aluminum 3/4-way direct mount body, 2 position normal closed or fail-in-place, for ordinary or hazardous locations.

NV Series Inline
Aluminum 3 or 4-way body with NPT ports, 2 position normal closed, for ordinary or hazardous locations.



SSV Series NAMUR
Stainless steel 3/4-way direct mount body, 2 position normal closed, for ordinary or hazardous locations.

S3 Series NAMUR
Aluminum 3/4-way direct mount body, 3 position center return, for ordinary or hazardous locations.

Locations	Ordinary, Hazardous, IP65
Materials	Aluminum, Stainless Steel
Ambient Temp. Ranges	-4°F to 122°F Standard (158°F High Temp Option)
Body Type	3 or 4 Way Aluminum

Operation Media	Gas
Voltages	AC/DC, Ordinary & Hazardous Locations
Mounting	NAMUR or Inline NPT
Available Options	3-Way & 4-Way Polymer or Aluminum Spacer Plates, LED DIN Connector

Solenoid Valve Series Selection

Start from the top of the chart and work down to select the correct Solenoid Valve Series.

Mounting	Standard - NAMUR		Inline	
	Standard		Corrosive	Standard
Environment	Standard		Corrosive	Standard
Positions	2 Position	3 Position	2 Position	2 Position
Temperature	Standard	Standard	Standard	Standard
Recommended Series/Options	SV Series NAMUR	S3 Series NAMUR	SSV Series NAMUR	NV Series Inline
Available Options	3-Way & 4-Way Polymer or Aluminum Spacer Plates LED DIN Connector Molded Leads Mufflers			LED DIN Connector Molded Leads Mufflers

Solenoid Valve Technical Brochure

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SV Series NAMUR

Aluminum 3/4-way direct mount body, 2 position normal closed or fail-in-place, for ordinary or hazardous locations.

Coil	Temperature Range	Seals
Class F	-4°F (-20°C) to 122°F (50°C)	Standard (BUNA)
Class H	0°F (-18°C) to 158°F (70°C)	Standard (BUNA)

NV Series Inline

Aluminum 3 or 4-way body with NPT ports, 2 position normal close or fail-in-place, for ordinary or hazardous locations.

Coil	Temperature Range	Seals
Class F	-4°F (-20°C) to 122°F (50°C)	Standard (BUNA)
Class H	0°F (-18°C) to 158°F (70°C)	Standard (BUNA)



SSV Series NAMUR

Stainless steel 3/4-way direct mount body, 2 position normal closed, for ordinary or hazardous locations.

Coil	Temperature Range	Seals
Class F	-4°F (-20°C) to 122°F (50°C)	Standard (BUNA)
Class H	0°F (-18°C) to 158°F (70°C)	Standard (BUNA)

S3 Series NAMUR

Aluminum 3/4-way direct mount body, 3 position center return, for ordinary or hazardous locations.

Coil	Temperature Range	Seals
Class F	-4°F (-20°C) to 122°F (50°C)	Standard (BUNA)
Class H	0°F (-18°C) to 158°F (70°C)	Standard (BUNA)



Coil Data

Coils for Models 6, 6H, 7, & 9

Model 6

Primary Voltage	Voltage (secondary)	Power level	Watts (DC) / VA (AC)	Insulation Class	Resistance (ohms)	Approvals	Inrush Power Draw (AC only)	IP Rating	Electrical Connection	Ambient Temp.
12 Vdc	24 Vac	4	6.9	F	40.1	UL	10.2	65/67*	DIN, Ind. form **	-20°C (-4°F) to 50°C (122°F)
24 Vdc	48 Vac	4	6.9	F	97.9	UL	n/a	65/67*	DIN, Ind. form **	-20°C (-4°F) to 50°C (122°F)
120 Vac	n/a	4	6.9	F	619	UL	12.4	65/67*	DIN, Ind. form **	-20°C (-4°F) to 50°C (122°F)
230Vdc	125 Vac	4	6.9	F	2475	UL	n/a	65/67*	DIN, Ind. form **	-20°C (-4°F) to 50°C (122°F)
24 Vdc	n/a	4	3.0	F	200	ATEX	n/a	65	DIN, Ind. form **	-15°C (+5°F) to 50°C (122°F)
24 Vdc	n/a	4	2.7	H	216	n/a	n/a	65	DIN, form A	-20°C (-4°F) to 80°C (176°F)
120 Vac	n/a	4	3.7	H	741	n/a	6.84	65	DIN, form A	-20°C (-4°F) to 80°C (176°F)
240 Vac	n/a	4	3.7	H	2924	n/a	6.72	65	DIN, form A	-20°C (-4°F) to 80°C (176°F)

* Note: IP67 can be achieved by the addition of a seal kit accessory.

** Note: Industry form is similar to form B but has flat bladed connection.

Model H6

Primary Voltage	Voltage (secondary)	Power level	Watts (DC) / VA (AC)	Insulation Class	Resistance (ohms)	Approvals	Inrush Power Draw (AC only)	IP Rating	Electrical Connection	Ambient Temp.
24 Vdc	n/a	4	2.7	H	216	n/a	n/a	65	DIN, form A	-20°C (-4°F) to 80°C (176°F)
120 Vac	n/a	4	3.7	H	741	n/a	6.84	65	DIN, form A	-20°C (-4°F) to 80°C (176°F)
240 Vac	n/a	4	3.7	H	2924	n/a	6.72	65	DIN, form A	-20°C (-4°F) to 80°C (176°F)

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Model 7

Primary Voltage	Voltage (secondary)	Power level	Watts (DC) / VA (AC)	Insulation Class	Resistance (ohms)	Approvals	Inrush Power Draw (AC only)	IP rating	Electrical Connection	Ambient Temp.
24 Vdc	n/a	1	1.6	F	n/a	CSA / FM	n/a	65	DIN, form A	-40°C (-40°F) to 50°C (122°F)
24 Vdc	n/a	1	< 3.22	H	n/a	ATEX	n/a	65	DIN, form A	-40°C (-40°F) to 85°C (185°F)

Model 9

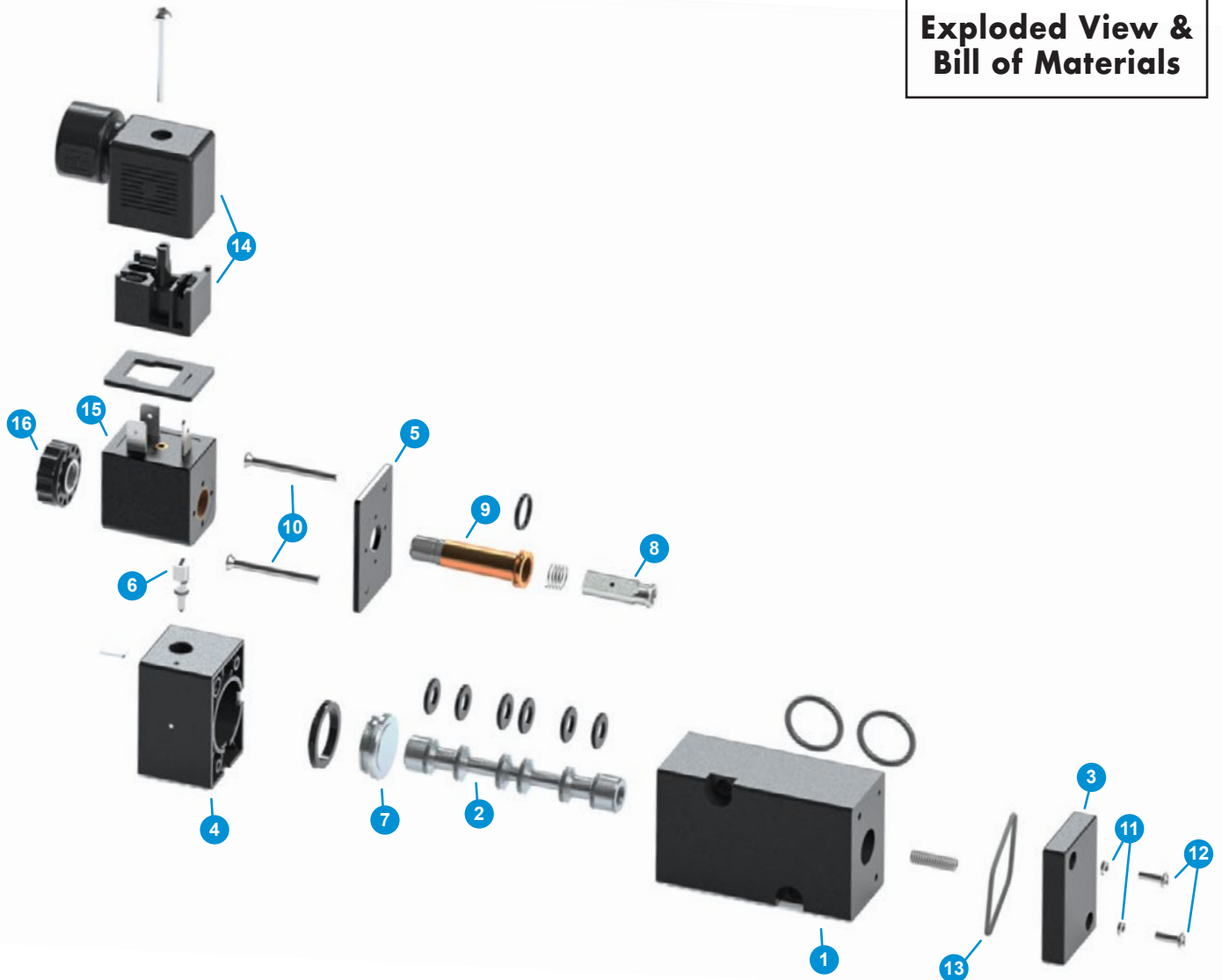
Primary Voltage	Voltage (secondary)	Power level	Watts (DC) / VA (AC)	Insulation Class	Resistance (ohms)	Approvals	Inrush Power Draw (AC only)	IP rating	Electrical Connection	Ambient Temp.
12 Vdc	n/a	4 & 5	4.5	H	32.2	CSA / FM	n/a	65	Flying Lead	-20°C (-4°F) to 60°C (140°F)
24 Vdc	n/a	4 & 5	4.6	H	126	CSA / FM	n/a	65	Flying Lead	-20°C (-4°F) to 60°C (140°F)
110/120 Vac	n/a	4 & 5	6.8	H	530	CSA / FM	12.3	65	Flying Lead	-20°C (-4°F) to 60°C (140°F)
220/240 Vac	n/a	4 & 5	6.8	H	2345	CSA / FM	12.3	65	Flying Lead	-20°C (-4°F) to 60°C (140°F)
24 Vac	n/a	3	n/a	F	n/a	ATEX	n/a	65	Flying Lead	-20°C (-4°F) to 50°C (122°F)
125 Vdc	n/a	5	n/a	F	n/a	ATEX	n/a	65	Flying Lead	-20°C (-4°F) to 50°C (122°F)

SV Series Technical Data

Exploded View, Materials of Construction, & Dimensional Data

SV Series

Exploded View & Bill of Materials



No.	DESCRIPTION	MATERIALS
1	Body	Aluminum
2	Spool Assembly	Aluminum / NBR
3	End Cap Assembly	Aluminum
4	Spool Valve Cap Assembly	Polypropylene
5	End Plate	Carbon Steel
6	Manual Button	Aluminum
7	Pilot Piston	Aluminum
8	Armature	Iron

No.	DESCRIPTION	MATERIALS
9	Armature Housing	Brass / Stainless Steel
10	End Plate Screw	Plated Steel
11	End Cap Screw Washers	Plated Steel
12	End Cap Screw	Plated Steel
13	Back O-Ring	NBR
14	Din	Materials Depend on Options Selected
15	Coil	Materials Depend on Options Selected
16	Coil Nut	Technopolymer

*Note: All exposed bare metal parts are painted.

Solenoid Valve Technical Brochure

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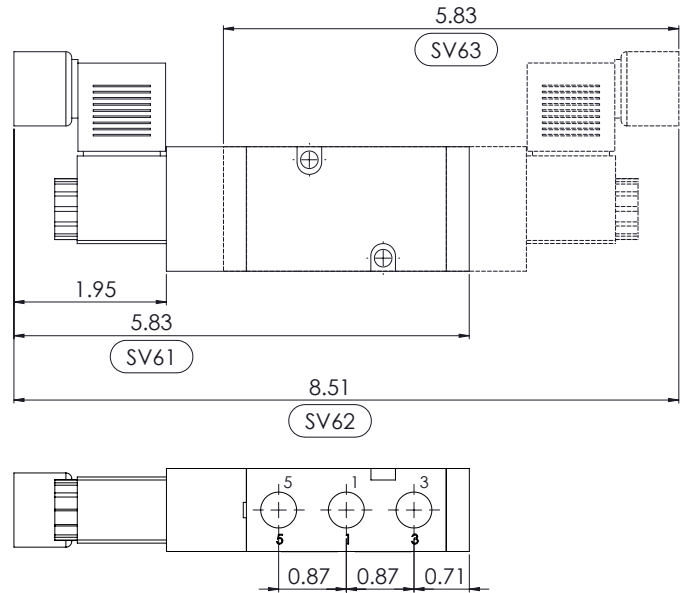
SV Model 6

Data Sheet

TECHNICAL DATA

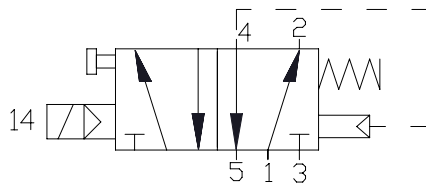
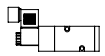
Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 9.4VA holding 6.9VA
Power input = DC 4.8W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "F"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/4" NPT
Operating pressure = min. 2 Bar (30 PSI) -
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 1.1
Max operating frequency = 600/1'
Room temperature limit = $-4^{\circ}\text{F} \sim 158^{\circ}\text{F}$
Weight = 0.80 lb

DIMENSIONS

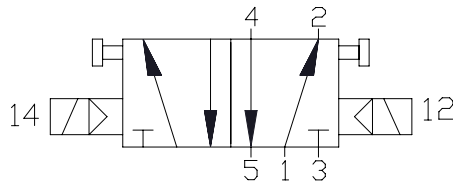
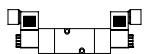


FLOW DIAGRAMS

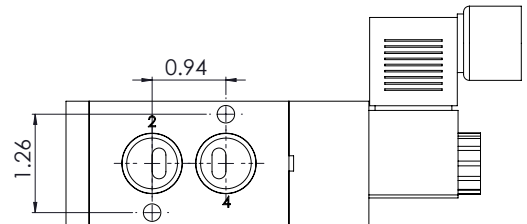
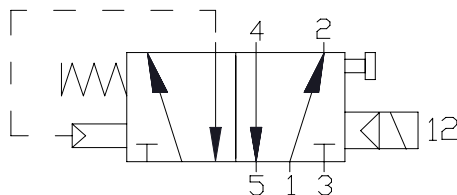
SV61
Left Pilot



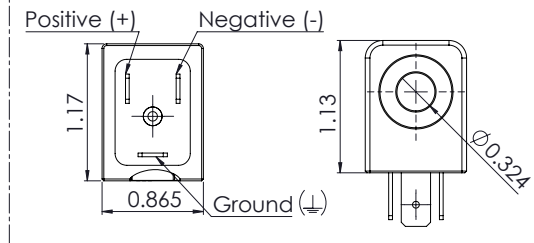
SV62
Dual Pilot



SV63
Right Pilot



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

SV Series Technical Data (Cont.)

Exploded View, Materials of Construction, & Dimensional Data

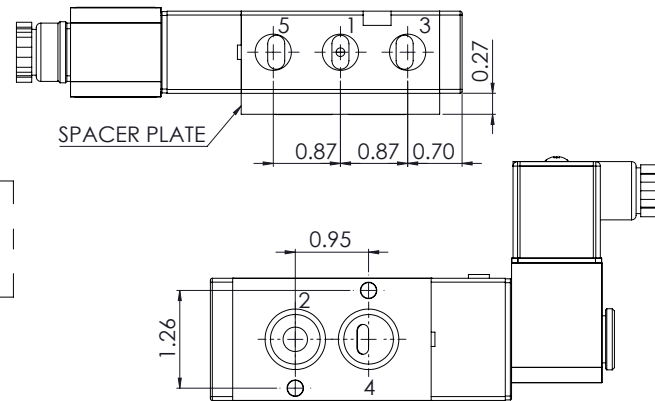
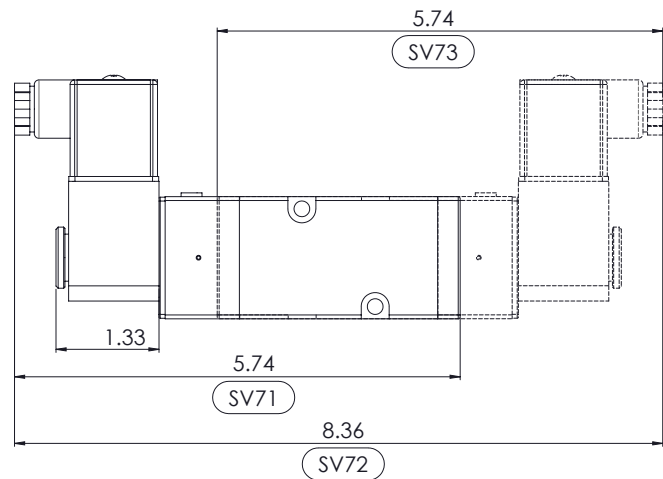
SV Model 7

Data Sheet

TECHNICAL DATA

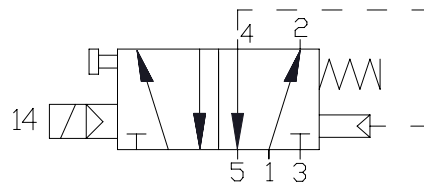
Standard voltages = 24V DC
 Power input = DC 1.6W
 Voltage tolerance = $\pm 10\%$
 Coil insulation = class "F"
 Duty cycle = 100%
 Protection class = IP65
 Intrinsically Safe Coil
 Air supply connection = 1/4" NPT
 Operating pressure = min. 2 Bar (30 PSI) –
 max. 8 Bar (115 PSI)
 Din connector = Strain Relief
 Flow factor = Cv 1.1
 Max operating frequency = 600/1'
 Room temperature limit = $-4^{\circ}\text{F} \sim 122^{\circ}\text{F}$
 Weight = 0.80 lb
 V Max. = 28V DC
 I Max. = 115mA
 Max. Valve Pressure = 115 PSI
 Hazardous Location Class
 Class I: Groups A, B, C, and D
 Class II: Groups E, F, and G
 Class III: Div. I

DIMENSIONS

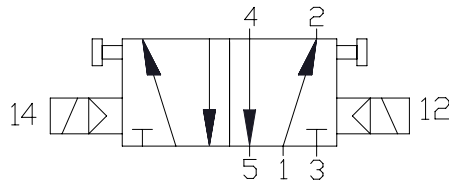
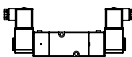


FLOW DIAGRAMS

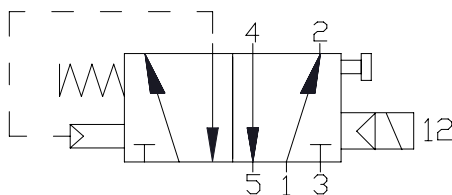
SV71
Left Pilot



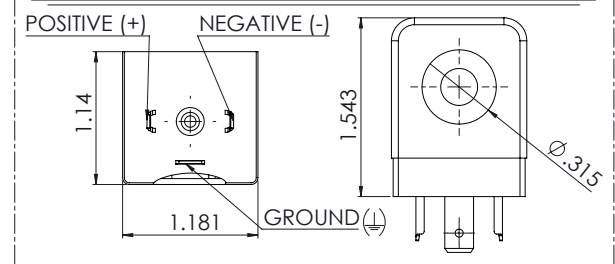
SV72
Dual Pilot



SV73
Right Pilot



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

Solenoid Valve Technical Brochure

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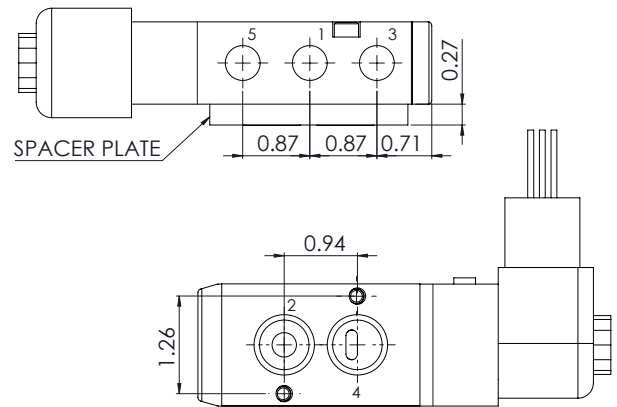
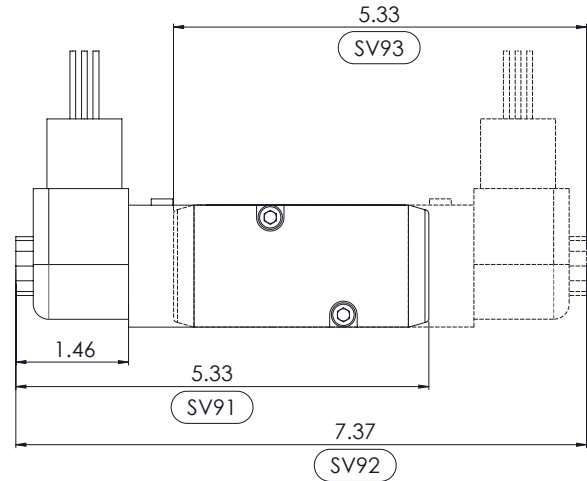
SV Model 9

Data Sheet

TECHNICAL DATA

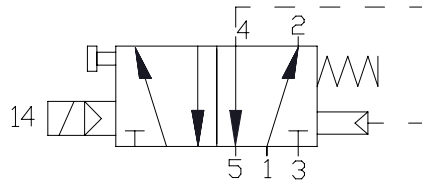
Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 7.5VA holding 5VA
Power input = DC 6W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "H"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/4" NPT
Operating pressure = min. 2 Bar (30 PSI) -
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 1.1
Max operating frequency = 600/1'
Room temperature limit = -4°F~140°F
Weight = 0.95 lb
Hazardous Location Class
Class I: Groups A, B, C, and D
Class II: Groups E, F, and G
Class III: Div. I

DIMENSIONS

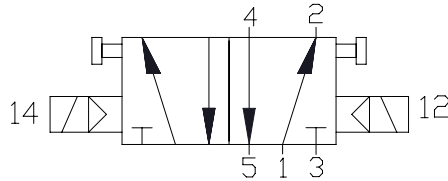
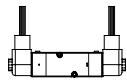


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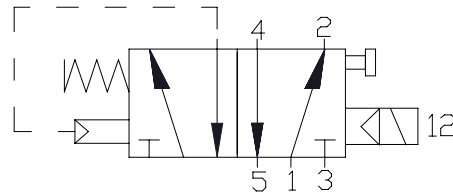
SV91
Left Pilot



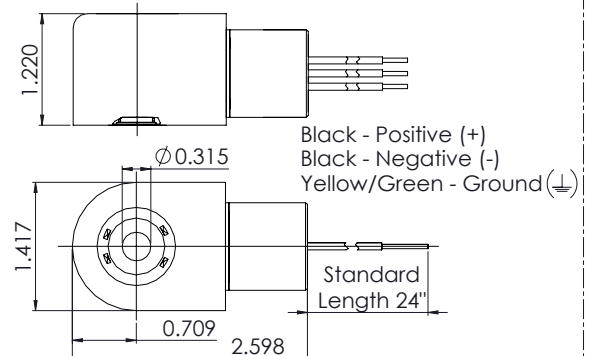
SV92
Dual Pilot



SV93
Right Pilot



COIL

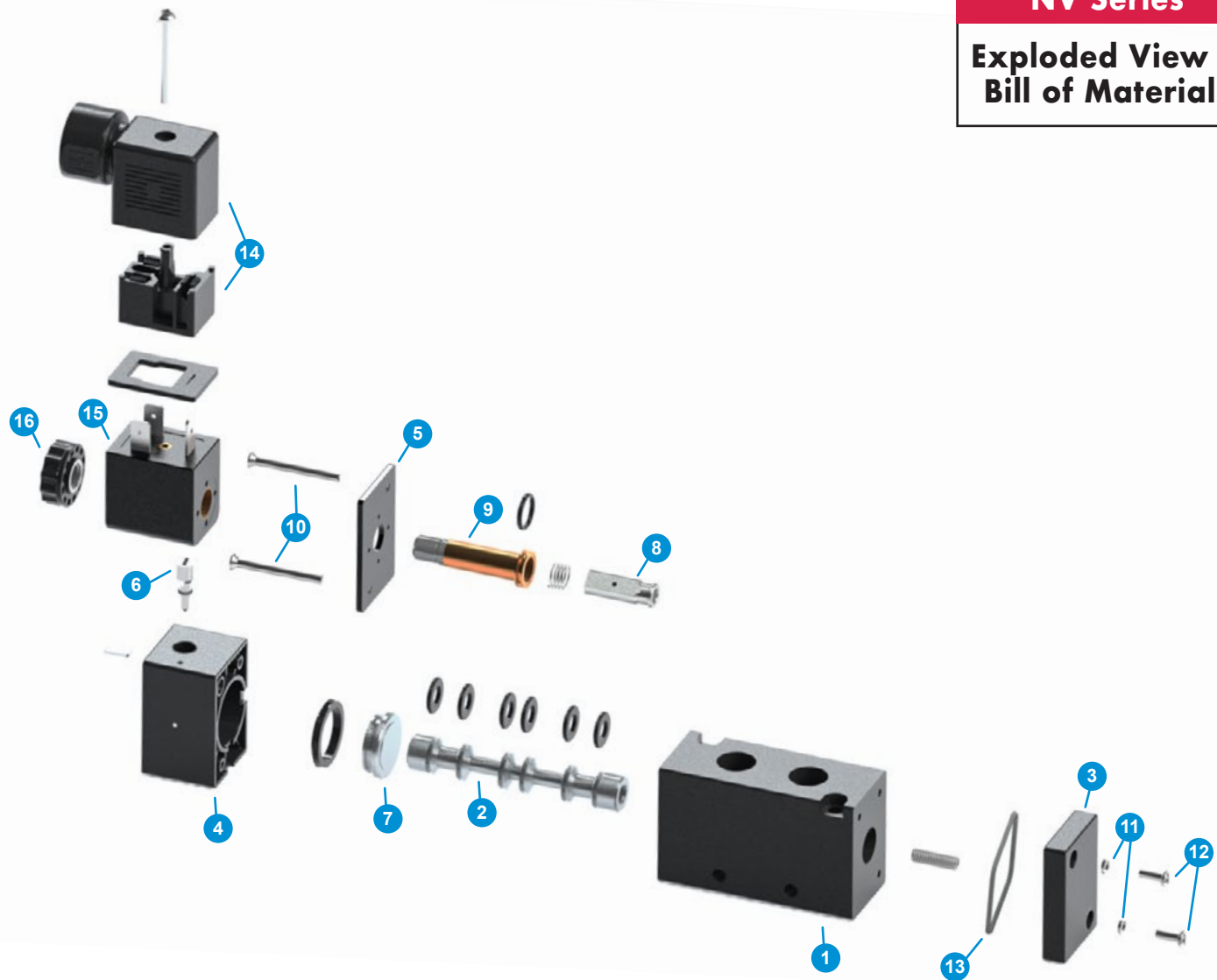


NV Series Technical Data

Exploded View, Materials of Construction, & Dimensional Data

NV Series

Exploded View & Bill of Materials



No.	DESCRIPTION	MATERIALS
1	Body	Aluminum
2	Spool Assembly	Aluminum / NBR
3	End Cap Assembly	Aluminum
4	Spool Valve Cap Assembly	Polypropylene
5	End Plate	Carbon Steel
6	Manual Button	Aluminum
7	Pilot Piston	Aluminum
8	Armature	Iron

No.	DESCRIPTION	MATERIALS
9	Armature Housing	Brass / Stainless Steel
10	End Plate Screw	Plated Steel
11	End Cap Screw Washers	Plated Steel
12	End Cap Screw	Plated Steel
13	Back O-Ring	NBR
14	Din	Materials Depend on Options Selected
15	Coil	Materials Depend on Options Selected
16	Coil Nut	Technopolymer

*Note: All exposed bare metal parts are painted.

Solenoid Valve Technical Brochure

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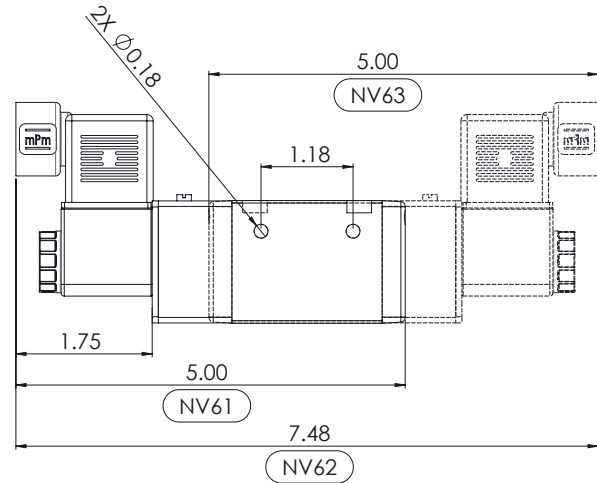
NV Model 6 (3-Way)

Data Sheet

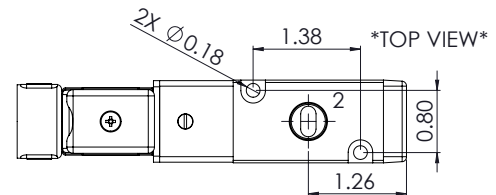
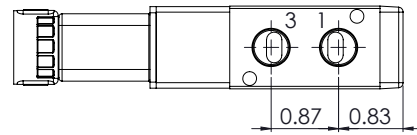
TECHNICAL DATA

Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 9.4VA holding 6.9VA
Power input = DC 4.8W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "F"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/4" NPT
Operating pressure = min. 2 Bar (30 PSI) –
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 1.1
Max operating frequency = 600/1'
Room temperature limit = $-4^{\circ}\text{F} \sim 158^{\circ}\text{F}$
Weight = 0.80 lb

DIMENSIONS



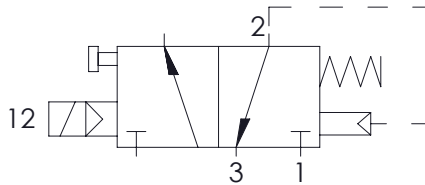
BOTTOM VIEW



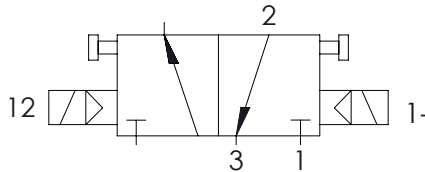
TOP VIEW

FLOW DIAGRAMS

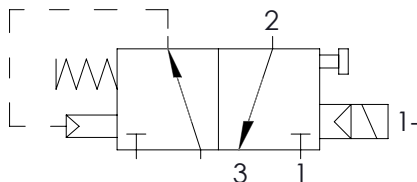
NV61
Normal Closed



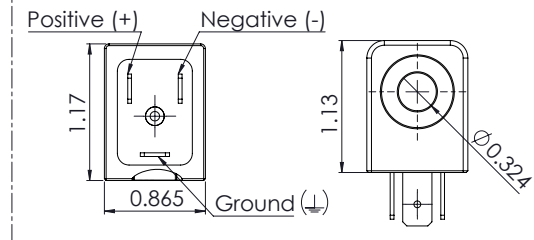
NV62
Dual Pilot



NV63
Normal Open



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

NV Series Technical Data (Cont.)

Exploded View, Materials of Construction, & Dimensional Data

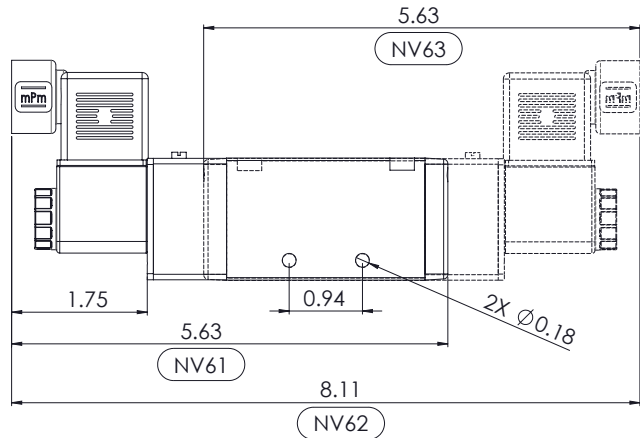
NV Model 6 (4-Way)

Data Sheet

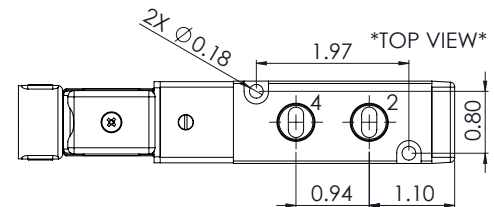
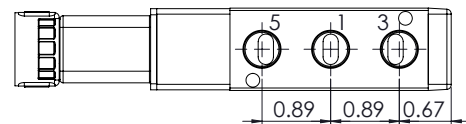
TECHNICAL DATA

Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 9.4VA holding 6.9VA
Power input = DC 4.8W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "F"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/4" NPT
Operating pressure = min. 2 Bar (30 PSI) -
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 1.1
Max operating frequency = 600/1'
Room temperature limit = -4°F~158°F
Weight = 0.80 lb

DIMENSIONS



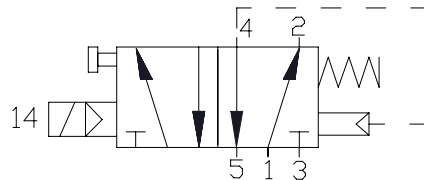
BOTTOM VIEW



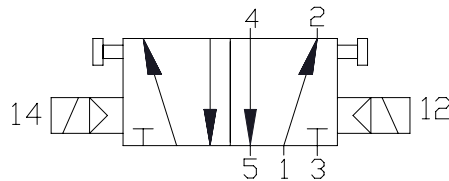
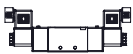
TOP VIEW

FLOW DIAGRAMS

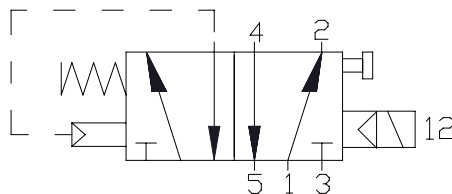
NV61
Left Pilot



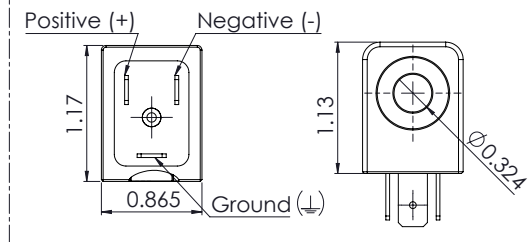
NV62
Dual Pilot



NV63
Right Pilot



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

Solenoid Valve Technical Brochure

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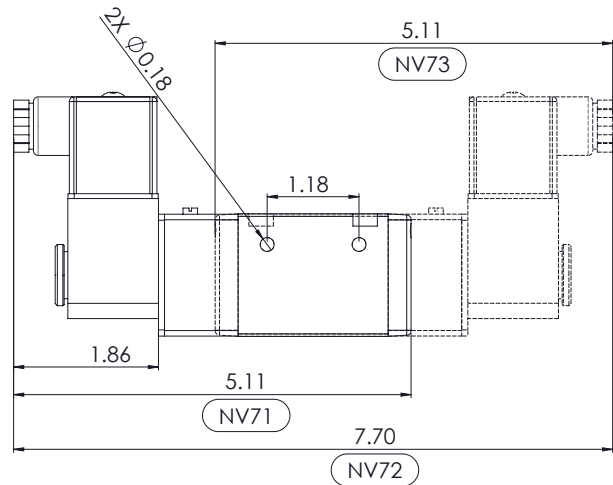
NV Model 7 (3-Way)

Data Sheet

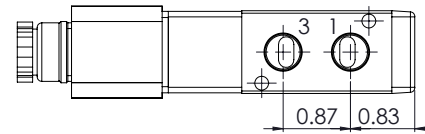
TECHNICAL DATA

Standard voltages = 24V DC
 Power input = DC 1.6W
 Voltage tolerance = $\pm 10\%$
 Coil insulation = class "F"
 Duty cycle = 100%
 Protection class = IP65
 Intrinsically Safe Coil
 Air supply connection = 1/4" NPT
 Operating pressure = min. 2 Bar (30 PSI) –
 max. 8 Bar (115 PSI)
 Din connector = Strain Relief
 Flow factor = Cv 1.1
 Max operating frequency = 600/1'
 Room temperature limit = $-4^{\circ}\text{F} \sim 122^{\circ}\text{F}$
 Weight = 0.80 lb
 V Max. = 28V DC
 I Max. = 115mA
 Max. Valve Pressure = 115 PSI
 Hazardous Location Class
 Class I: Groups A, B, C, and D
 Class II: Groups E, F, and G
 Class III: Div. I

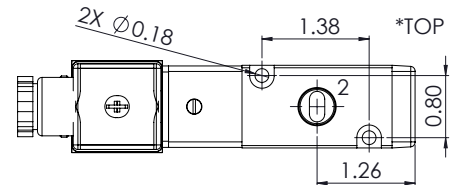
DIMENSIONS



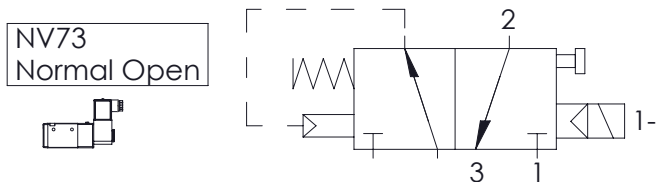
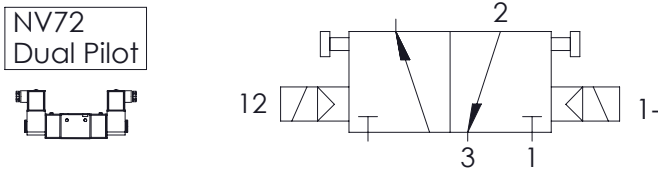
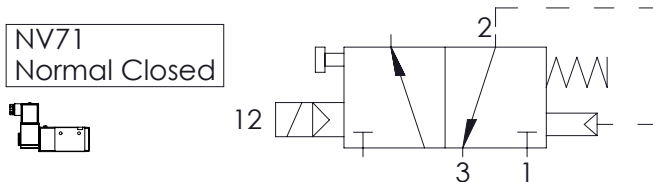
BOTTOM VIEW



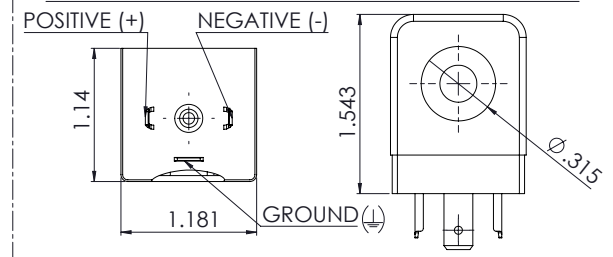
TOP VIEW



FLOW DIAGRAMS



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

NV Series Technical Data (Cont.)

Exploded View, Materials of Construction, & Dimensional Data

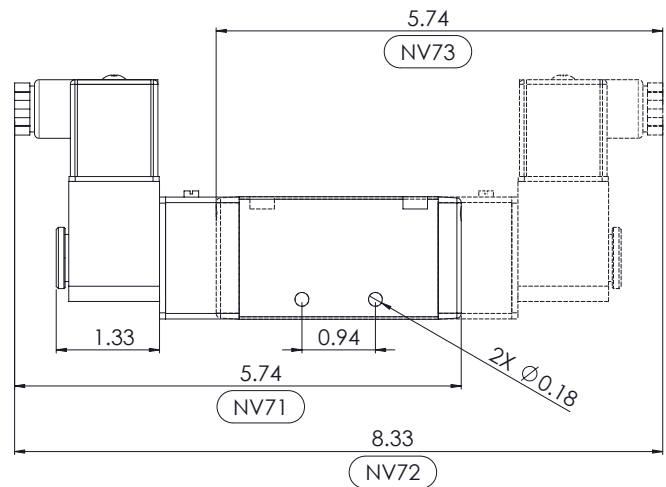
NV Model 7 (4-Way)

Data Sheet

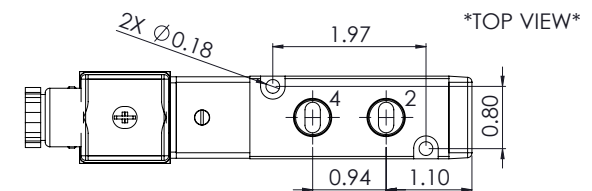
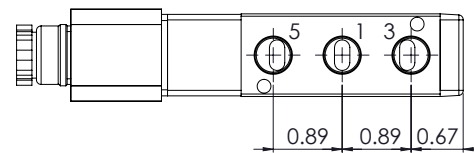
TECHNICAL DATA

Standard voltages = 24V DC
 Power input = DC 1.6W
 Voltage tolerance = $\pm 10\%$
 Coil insulation = class "F"
 Duty cycle = 100%
 Protection class = IP65
 Intrinsically Safe Coil
 Air supply connection = 1/4" NPT
 Operating pressure = min. 2 Bar (30 PSI) –
 max. 8 Bar (115 PSI)
 Din connector = Strain Relief
 Flow factor = Cv 1.1
 Max operating frequency = 600/1'
 Room temperature limit = $-4^{\circ}\text{F} \sim 122^{\circ}\text{F}$
 Weight = 0.80 lb
 V Max. = 28V DC
 I Max. = 115mA
 Max. Valve Pressure = 115 PSI
 Hazardous Location Class
 Class I: Groups A, B, C, and D
 Class II: Groups E, F, and G
 Class III: Div. I

DIMENSIONS



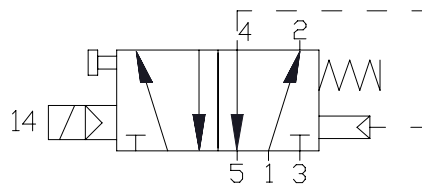
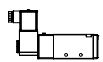
BOTTOM VIEW



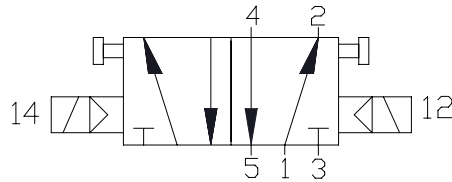
TOP VIEW

FLOW DIAGRAMS

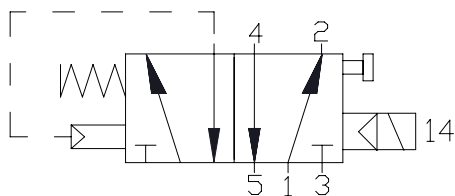
NV71
Left Pilot



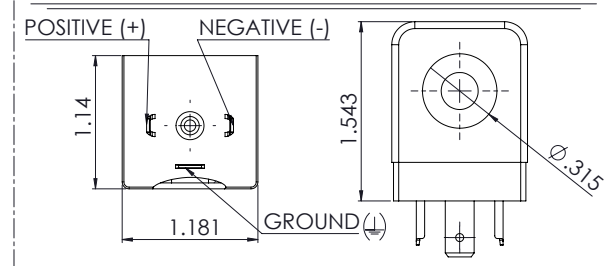
NV72
Dual Pilot



NV73
Right Pilot



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

Solenoid Valve Technical Brochure

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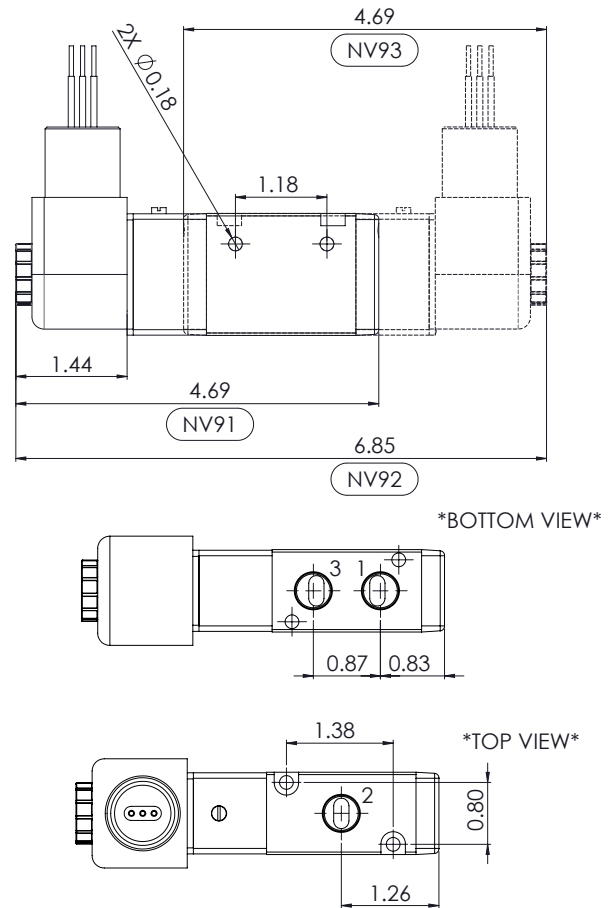
NV Model 9 (3-Way)

Data Sheet

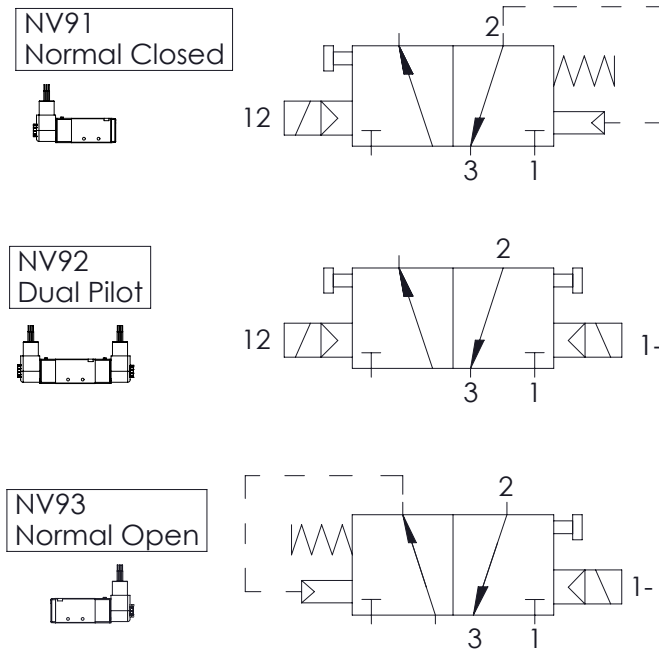
TECHNICAL DATA

Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 7.5VA holding 5VA
Power input = DC 6W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "H"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/4" NPT
Operating pressure = min. 2 Bar (30 PSI) –
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 1.1
Max operating frequency = 600/1'
Room temperature limit = -4°F~140°F
Weight = 0.95 lb
Hazardous Location Class
Class I: Groups A, B, C, and D
Class II: Groups E, F, and G
Class III: Div. I

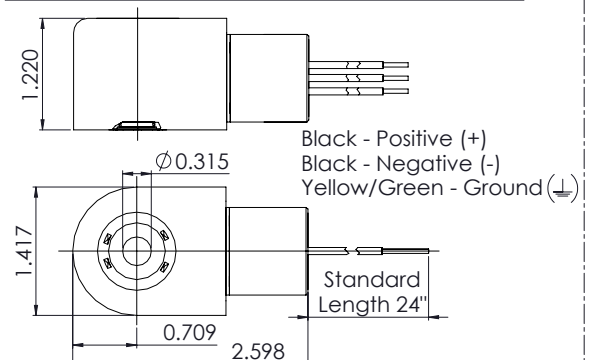
DIMENSIONS



FLOW DIAGRAMS



COIL



NV Series Technical Data (Cont.)

Exploded View, Materials of Construction, & Dimensional Data

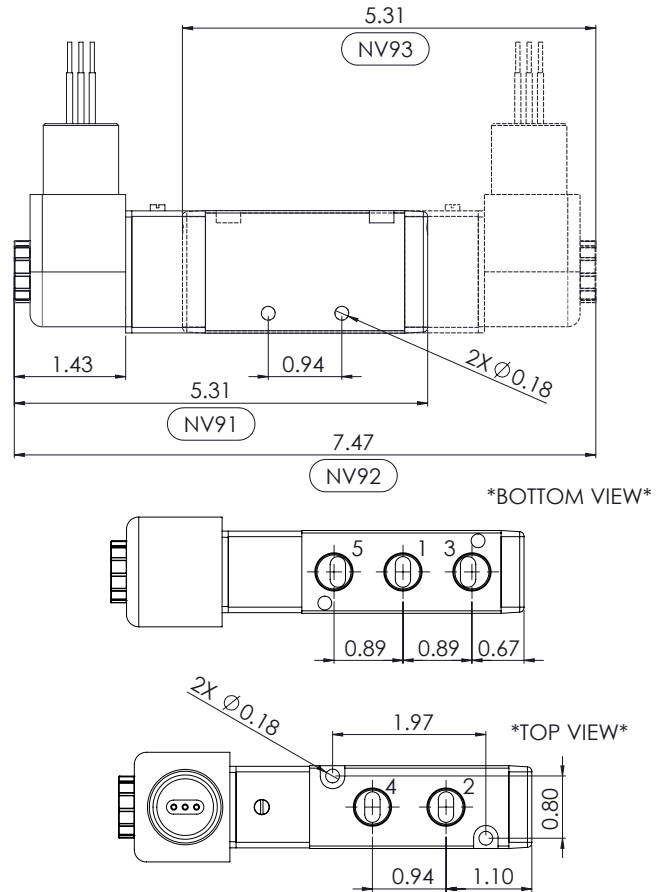
NV Model 9 (4-Way)

Data Sheet

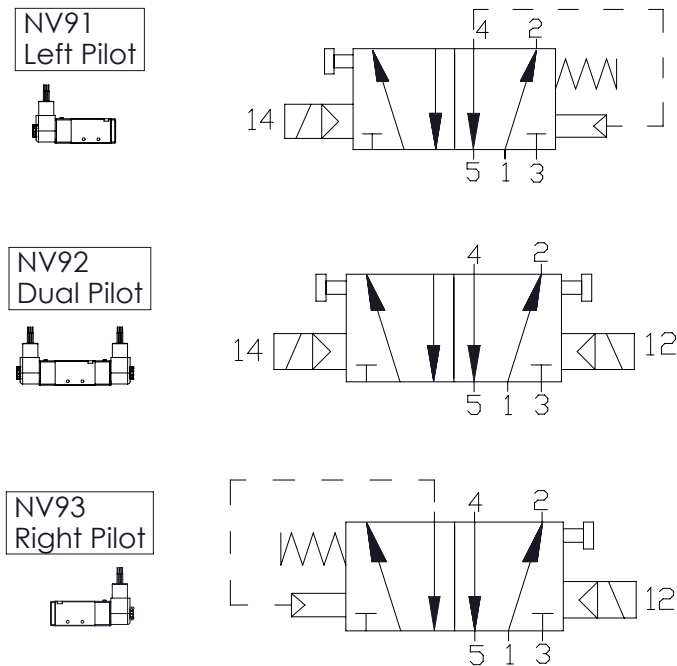
TECHNICAL DATA

Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 7.5VA holding 5VA
Power input = DC 6W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "H"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/4" NPT
Operating pressure = min. 2 Bar (30 PSI) -
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 1.1
Max operating frequency = 600/1'
Room temperature limit = -4°F~140°F
Weight = 0.95 lb
Hazardous Location Class
Class I: Groups A, B, C, and D
Class II: Groups E, F, and G
Class III: Div. I

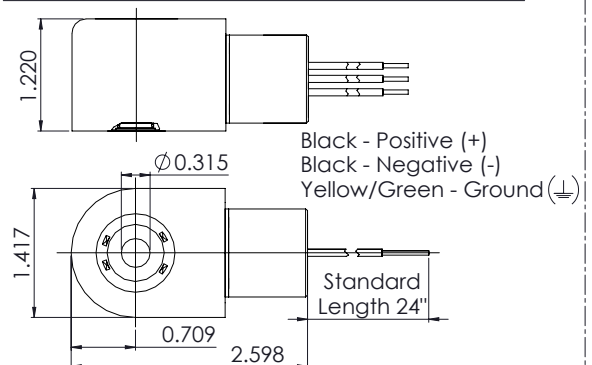
DIMENSIONS



FLOW DIAGRAMS



COIL



Solenoid Valve Technical Brochure

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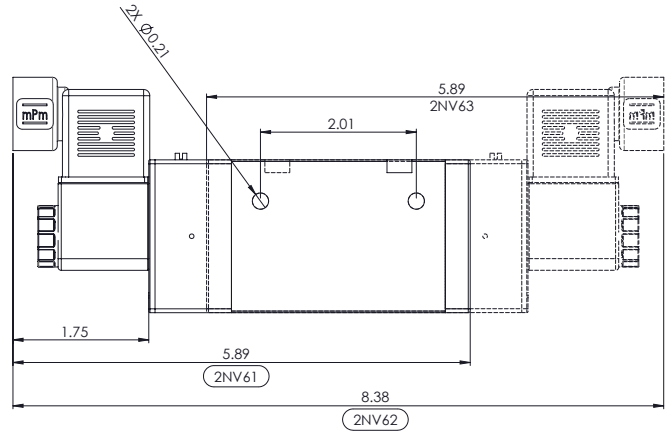
2NV Model 6 (3-Way)

Data Sheet

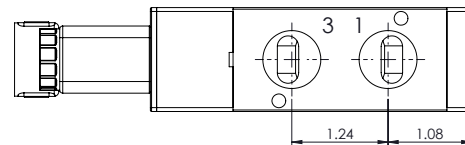
TECHNICAL DATA

Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 9.4VA holding 6.9VA
Power input = DC 4.8W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "F"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/2" NPT
Operating pressure = min. 2 Bar (30 PSI) -
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 2.79
Max operating frequency = 600/1'
Room temperature limit = $-4^{\circ}\text{F} \sim 158^{\circ}\text{F}$
Weight = 0.95 lb

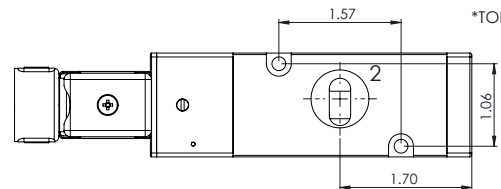
DIMENSIONS



BOTTOM VIEW

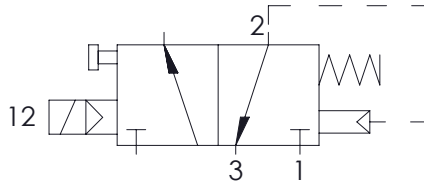
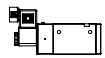


TOP VIEW

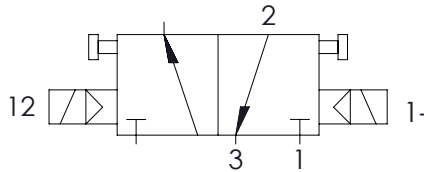
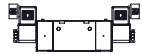


FLOW DIAGRAMS

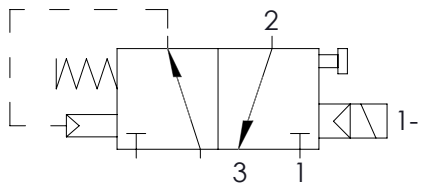
NV61
Normal Closed



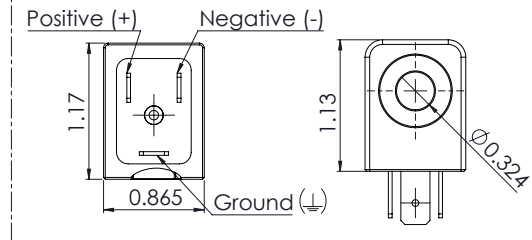
NV62
Dual Pilot



NV63
Normal Open



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

NV Series Technical Data (Cont.)

Exploded View, Materials of Construction, & Dimensional Data

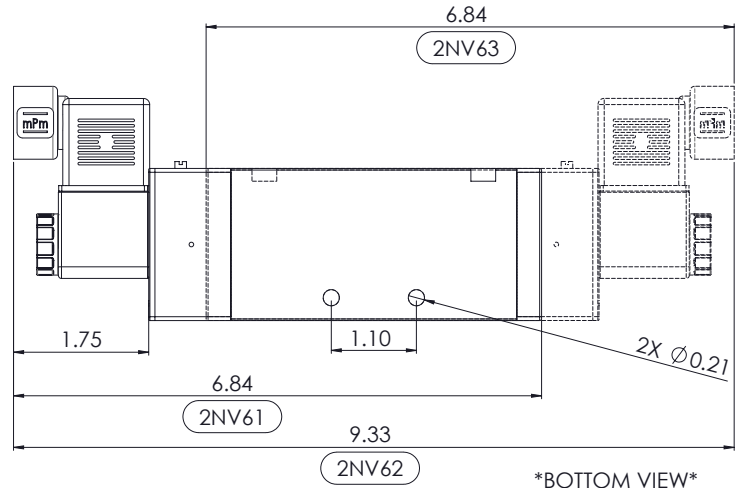
2NV Model 6 (4-Way)

Data Sheet

TECHNICAL DATA

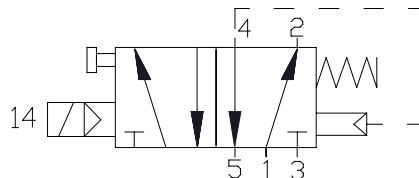
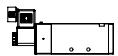
Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 9.4VA holding 6.9VA
Power input = DC 4.8W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "F"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/2" NPT
Operating pressure = min. 2 Bar (30 PSI) -
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 2.79
Max operating frequency = 600/1'
Room temperature limit = -4°F~158°F
Weight = 0.95 lb

DIMENSIONS

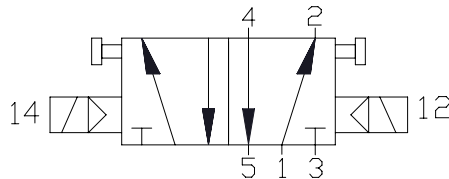


FLOW DIAGRAMS

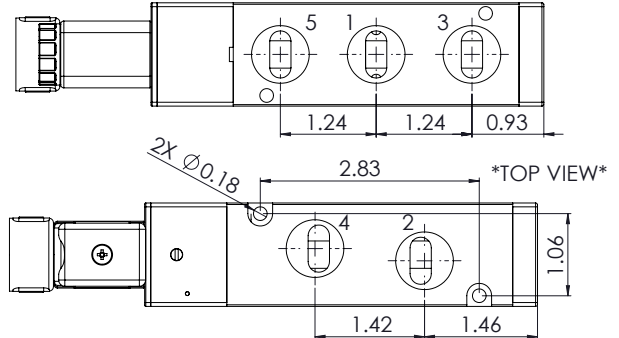
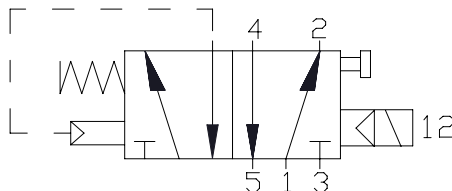
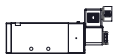
2NV61
Left Pilot



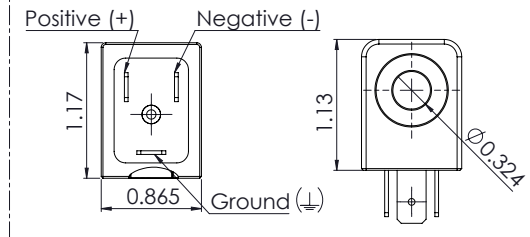
2NV62
Dual Pilot



2NV63
Right Pilot



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

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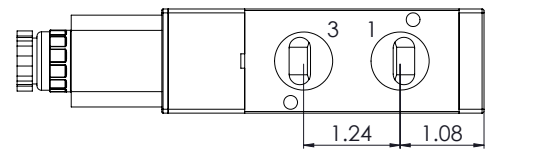
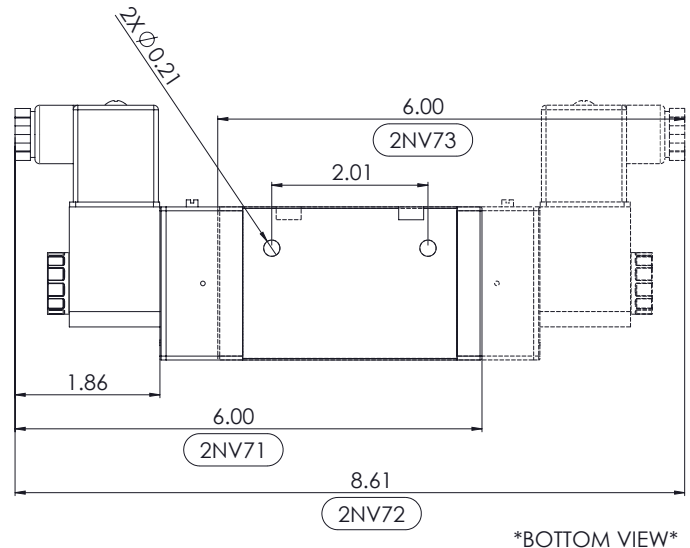
2NV Model 7 (3-Way)

Data Sheet

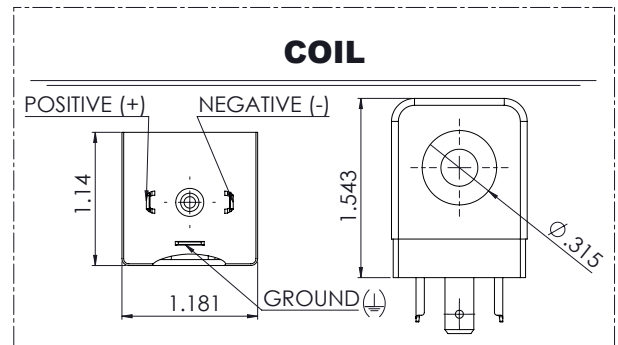
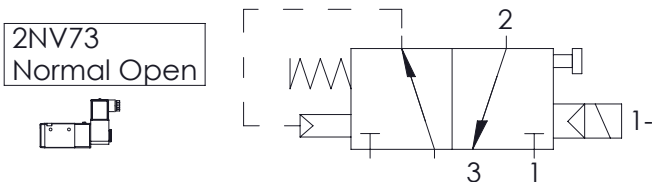
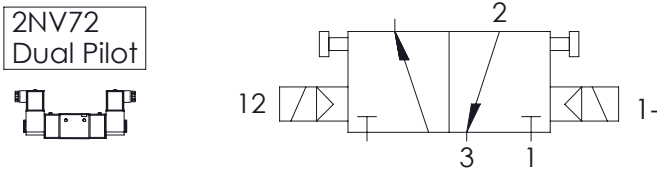
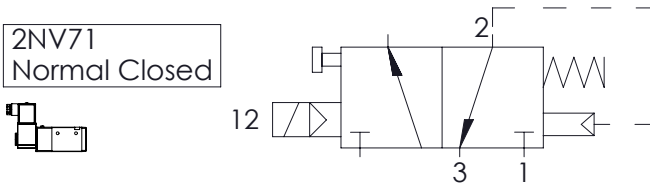
TECHNICAL DATA

Standard voltages = 24V DC
 Power input = DC 1.6W
 Voltage tolerance = $\pm 10\%$
 Coil insulation = class "F"
 Duty cycle = 100%
 Protection class = IP65
 Intrinsically Safe Coil
 Air supply connection = 1/2" NPT
 Operating pressure = min. 2 Bar (30 PSI) –
 max. 8 Bar (115 PSI)
 Din connector = Strain Relief
 Flow factor = Cv 2.79
 Max operating frequency = 600/1'
 Room temperature limit = $-4^{\circ}\text{F} \sim 122^{\circ}\text{F}$
 Weight = 0.95 lb
 V Max. = 28V DC
 I Max. = 115mA
 Max. Valve Pressure = 115 PSI
 Hazardous Location Class
 Class I: Groups A, B, C, and D
 Class II: Groups E, F, and G
 Class III: Div. I

DIMENSIONS



FLOW DIAGRAMS



Coils are polarity insensitive: Positive and Negative are interchangeable

NV Series Technical Data (Cont.)

Exploded View, Materials of Construction, & Dimensional Data

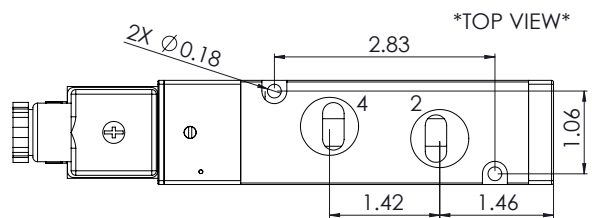
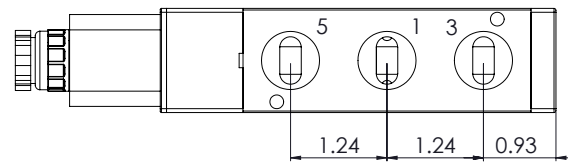
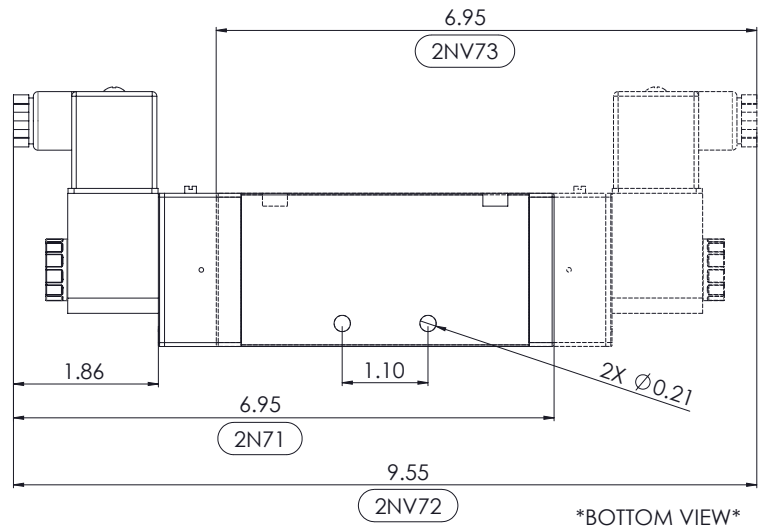
2NV Model 7 (4-Way)

Data Sheet

TECHNICAL DATA

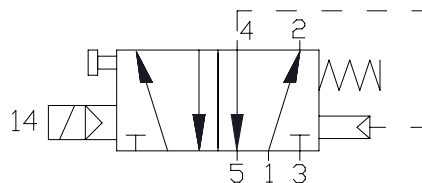
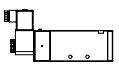
Standard voltages = 24V DC
 Power input = DC 1.6W
 Voltage tolerance = $\pm 10\%$
 Coil insulation = class "F"
 Duty cycle = 100%
 Protection class = IP65
 Intrinsically Safe Coil
 Air supply connection = 1/2" NPT
 Operating pressure = min. 2 Bar (30 PSI) –
 max. 8 Bar (115 PSI)
 Din connector = Strain Relief
 Flow factor = Cv 2.79
 Max operating frequency = 600/1'
 Room temperature limit = $-4^{\circ}\text{F} \sim 122^{\circ}\text{F}$
 Weight = 0.95 lb
 V Max. = 28V DC
 I Max. = 115mA
 Max. Valve Pressure = 115 PSI
 Hazardous Location Class
 Class I: Groups A, B, C, and D
 Class II: Groups E, F, and G
 Class III: Div. I

DIMENSIONS

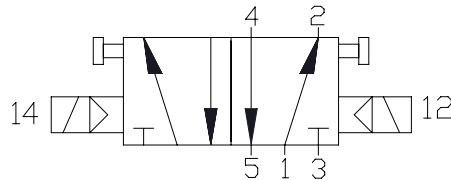


FLOW DIAGRAMS

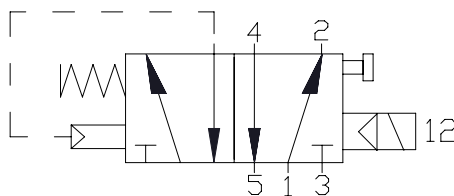
2NV71
Left Pilot



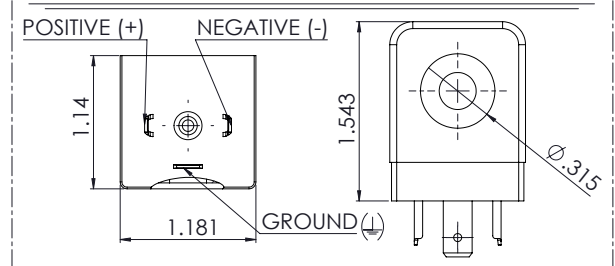
2NV72
Dual Pilot



2NV73
Right Pilot



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

Solenoid Valve Technical Brochure

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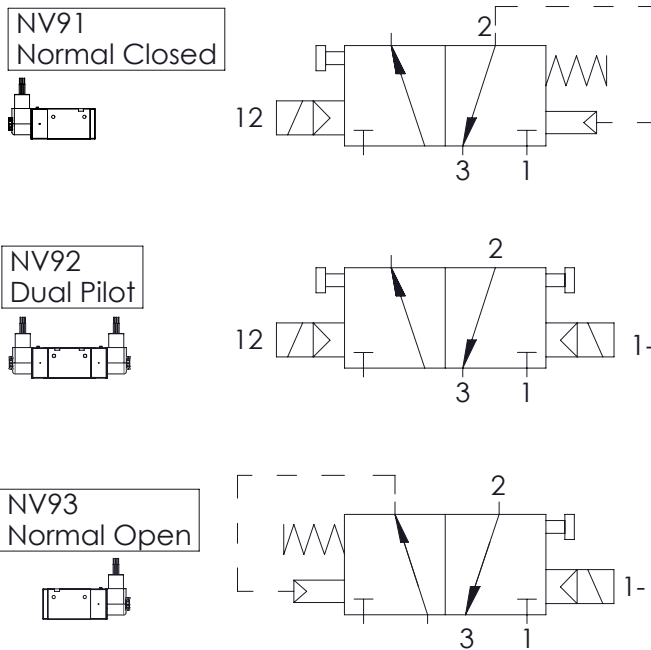
2NV Model 9 (3-Way)

Data Sheet

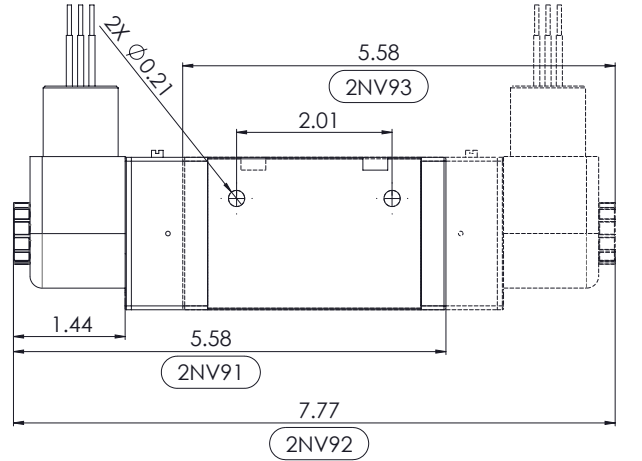
TECHNICAL DATA

Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 7.5VA holding 5VA
Power input = DC 6W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "H"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/2" NPT
Operating pressure = min. 2 Bar (30 PSI) –
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 2.79
Max operating frequency = 600/1'
Room temperature limit = -4°F~140°F
Weight = 1.04 lb
Hazardous Location Class
Class I: Groups A, B, C, and D
Class II: Groups E, F, and G
Class III: Div. I

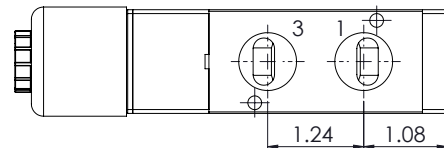
FLOW DIAGRAMS



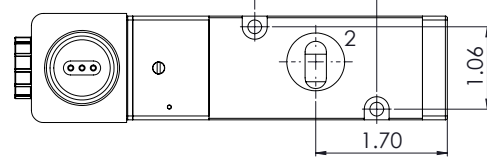
DIMENSIONS



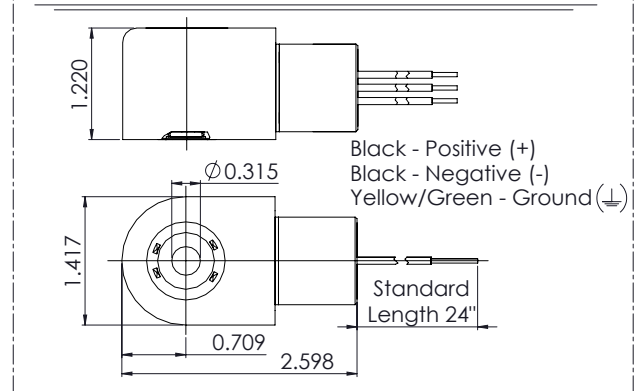
BOTTOM VIEW



TOP VIEW



COIL



NV Series Technical Data (Cont.)

Exploded View, Materials of Construction, & Dimensional Data

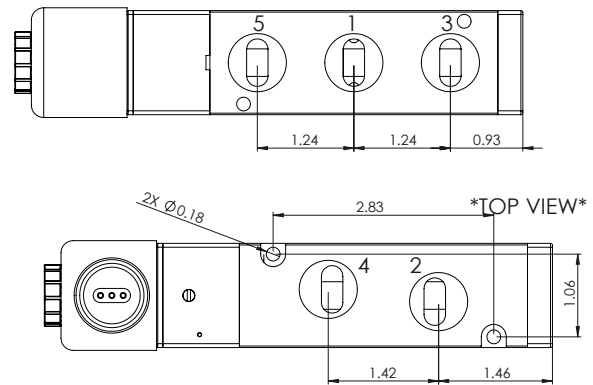
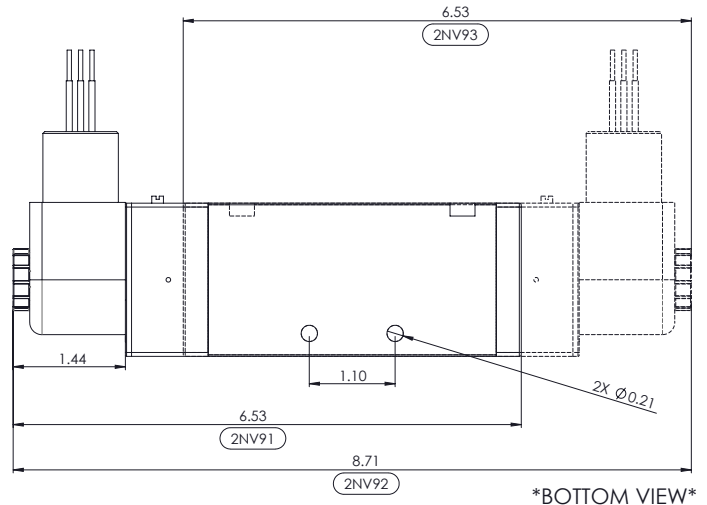
2NV Model 9 (4-Way)

Data Sheet

TECHNICAL DATA

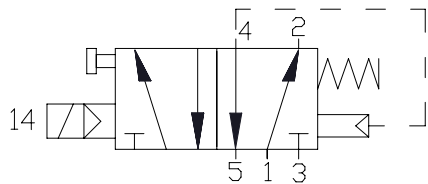
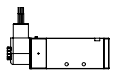
Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 7.5VA holding 5VA
Power input = DC 6W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "H"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/2" NPT
Operating pressure = min. 2 Bar (30 PSI) -
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 2.79
Max operating frequency = 600/1'
Room temperature limit = $-4^{\circ}\text{F} \sim 140^{\circ}\text{F}$
Weight = 1.04 lb
Hazardous Location Class
Class I: Groups A, B, C, and D
Class II: Groups E, F, and G
Class III: Div. I

DIMENSIONS

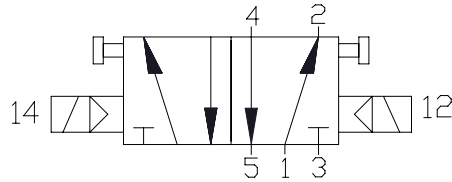


FLOW DIAGRAMS

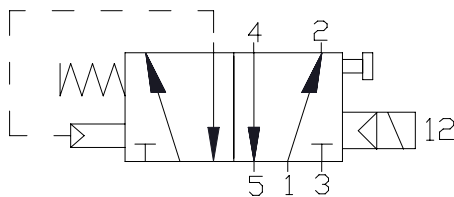
2NV91
Left Pilot



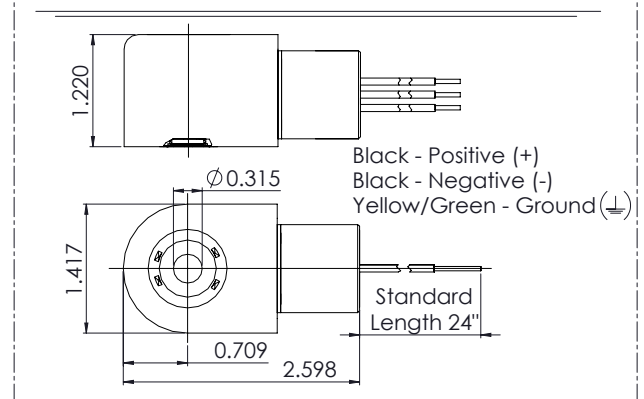
2NV92
Dual Pilot



2NV93
Right Pilot



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

Solenoid Valve Technical Brochure

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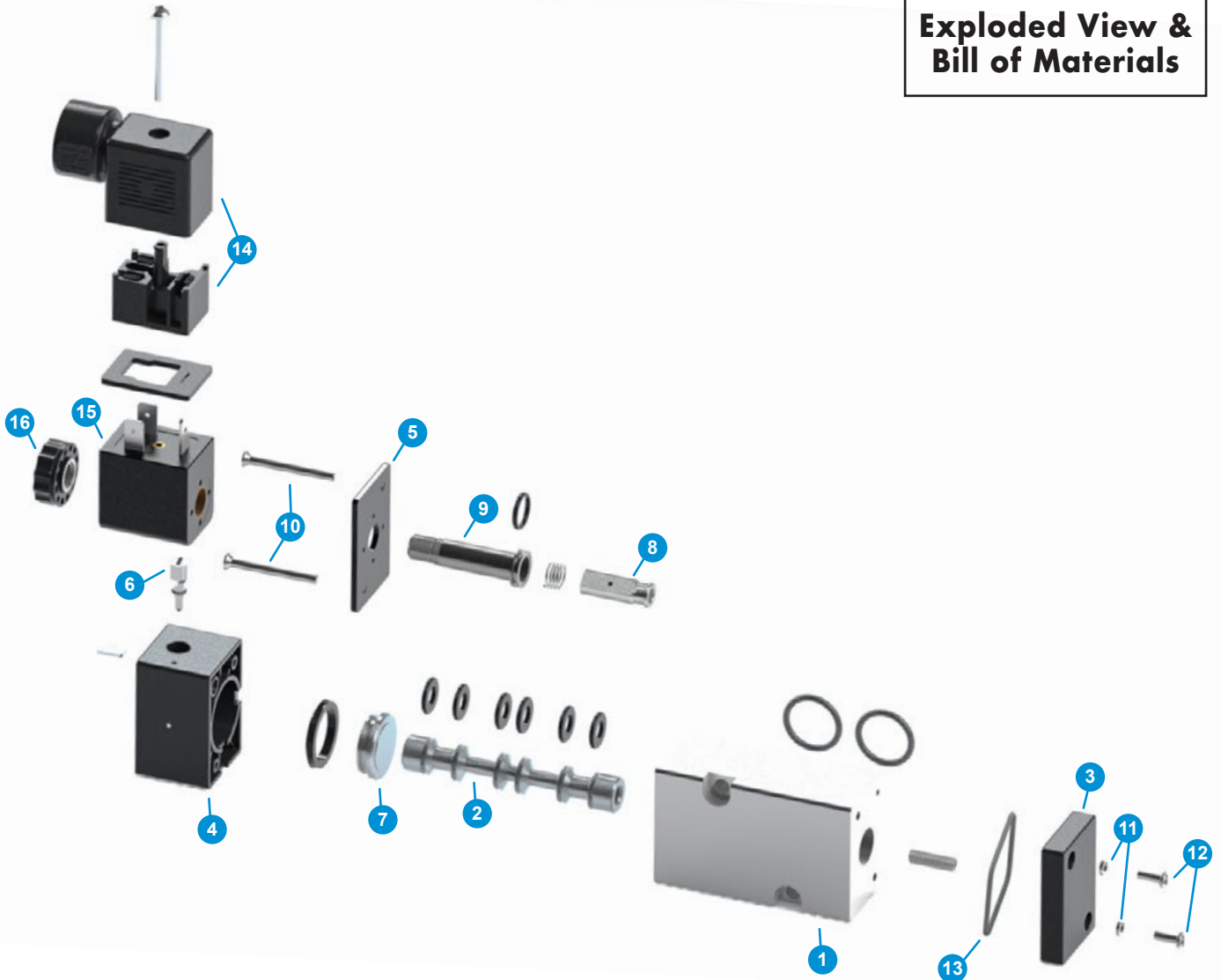
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SSV Series Technical Data

Exploded View, Materials of Construction, & Dimensional Data

SSV Series

Exploded View & Bill of Materials



No.	DESCRIPTION	MATERIALS
1	Body	316 Stainless Steel
2	Spool Assembly	Stainless Steel / NBR
3	End Cap Assembly	Stainless Steel
4	Spool Valve Cap Assembly	Polypropylene
5	End Plate	Stainless Steel
6	Manual Button	Stainless Steel
7	Pilot Piston	Stainless Steel
8	Armature	Iron

No.	DESCRIPTION	MATERIALS
9	Armature Housing	Brass / Stainless Steel
10	End Plate Screw	Stainless Steel
11	End Cap Screw Washers	Stainless Steel
12	End Cap Screw	Stainless Steel
13	Back O-Ring	NBR
14	Din	Materials Depend on Options Selected
15	Coil	Materials Depend on Options Selected
16	Coil Nut	Technopolymer

*Note: All exposed bare metal parts are painted.

Solenoid Valve Technical Brochure

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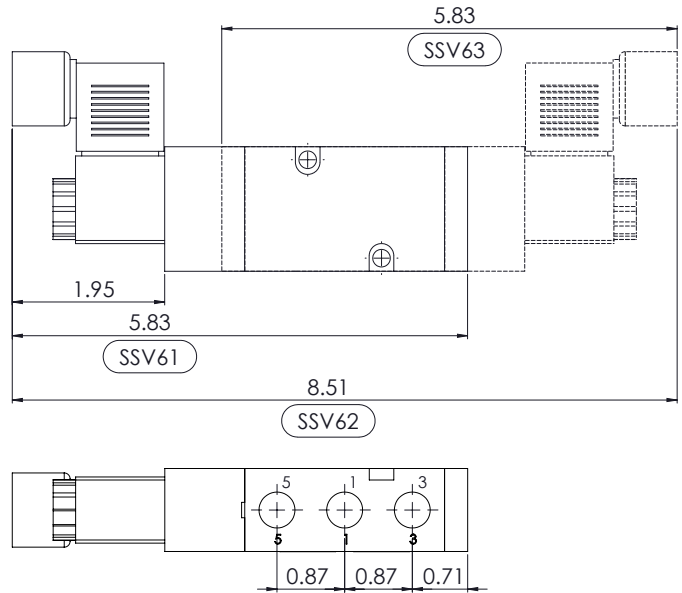
SSV Model 6

Data Sheet

TECHNICAL DATA

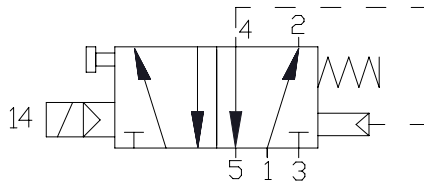
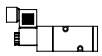
Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 9.4VA holding 6.9VA
Power input = DC 4.8W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "F"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/4" NPT
Operating pressure = min. 2 Bar (30 PSI) -
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 1.1
Max operating frequency = 600/1'
Room temperature limit = -4°F~158°F
Weight = 1.70 lb

DIMENSIONS

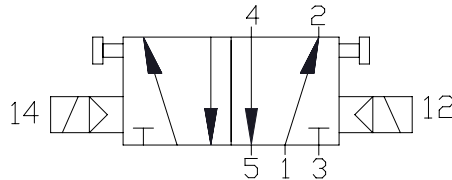
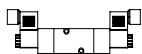


FLOW DIAGRAMS

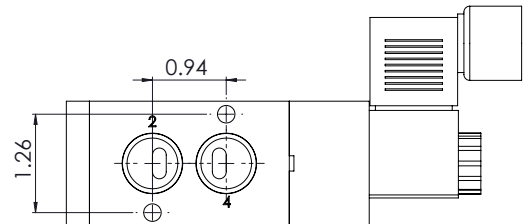
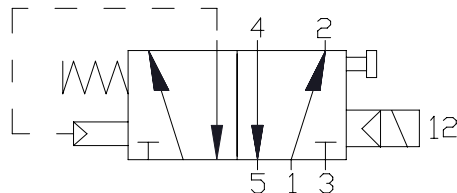
SSV61
Left Pilot



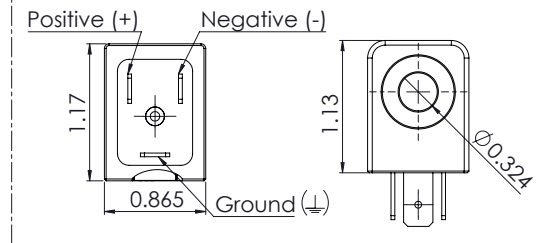
SSV62
Dual Pilot



SSV63
Right Pilot



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

SSV Series Technical Data (Cont.)

Exploded View, Materials of Construction, & Dimensional Data

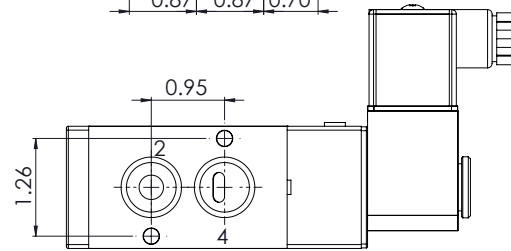
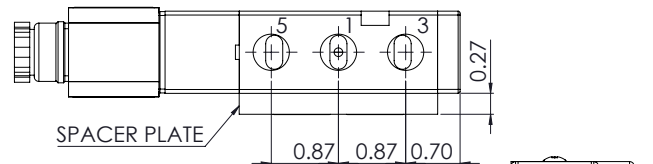
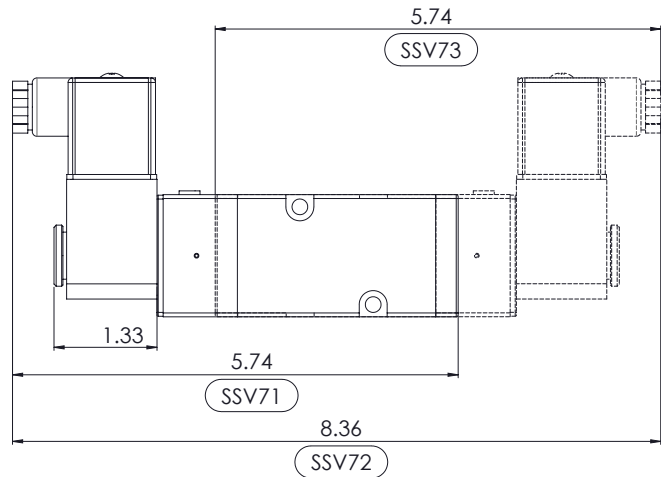
SSV Model 7

Data Sheet

TECHNICAL DATA

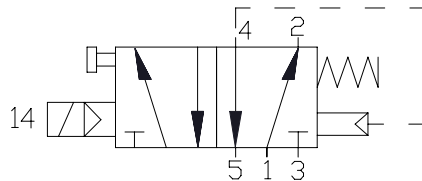
Standard voltages = 24V DC
 Power input = DC 1.6W
 Voltage tolerance = $\pm 10\%$
 Coil insulation = class "F"
 Duty cycle = 100%
 Protection class = IP65
 Intrinsically Safe Coil
 Air supply connection = 1/4" NPT
 Operating pressure = min. 2 Bar (30 PSI) –
 max. 8 Bar (115 PSI)
 Din connector = Strain Relief
 Flow factor = Cv 1.1
 Max operating frequency = 600/1'
 Room temperature limit = $-4^{\circ}\text{F} \sim 122^{\circ}\text{F}$
 Weight = 1.70 lb
 V Max. = 28V DC
 I Max. = 115mA
 Max. Valve Pressure = 115 PSI
 Hazardous Location Class
 Class I: Groups A, B, C, and D
 Class II: Groups E, F, and G
 Class III: Div. I

DIMENSIONS

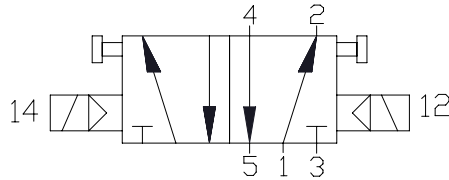


FLOW DIAGRAMS

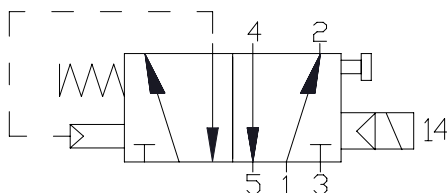
SSV71
Left Pilot



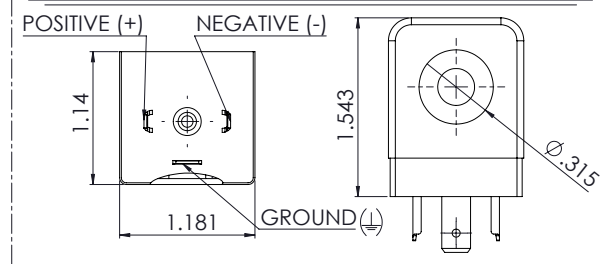
SSV72
Dual Pilot



SSV73
Right Pilot



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

Solenoid Valve Technical Brochure

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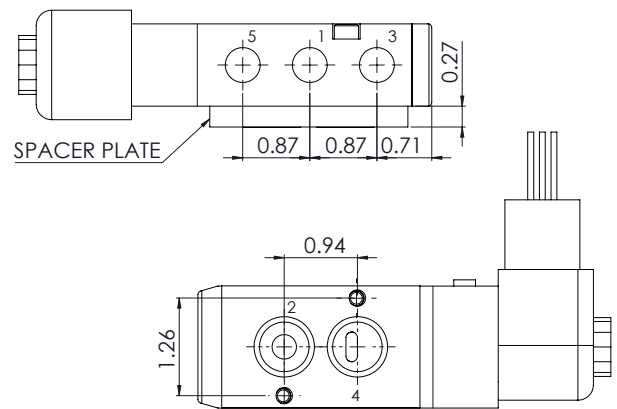
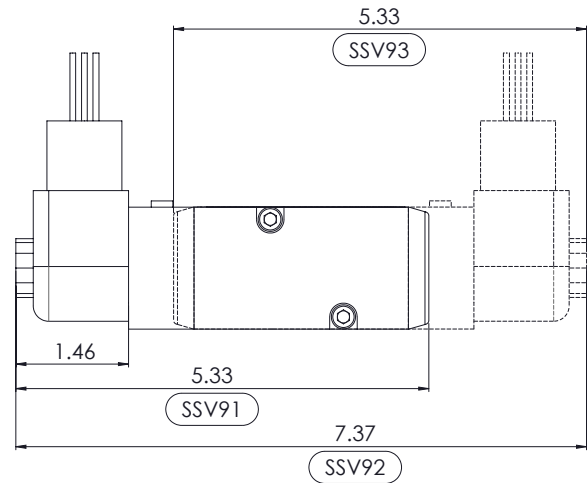
SSV Model 9

Data Sheet

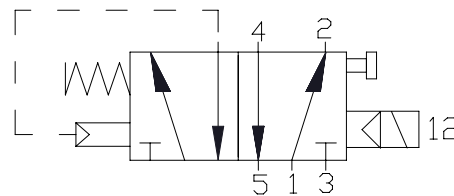
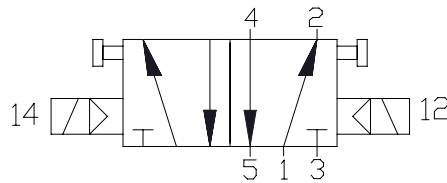
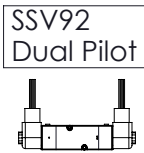
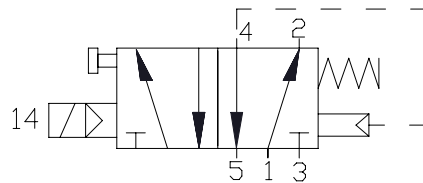
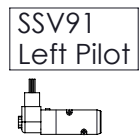
TECHNICAL DATA

Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 7.5VA holding 5VA
Power input = DC 6W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "H"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/4" NPT
Operating pressure = min. 2 Bar (30 PSI) -
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 1.1
Max operating frequency = 600/1'
Room temperature limit = -4°F~140°F
Weight = 1.85 lb
Hazardous Location Class
Class I: Groups A, B, C, and D
Class II: Groups E, F, and G
Class III: Div. I

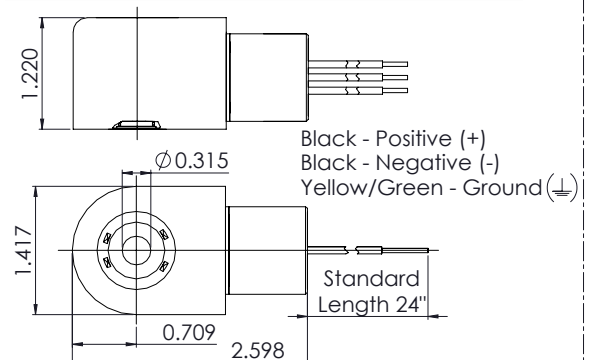
DIMENSIONS



FLOW DIAGRAMS



COIL

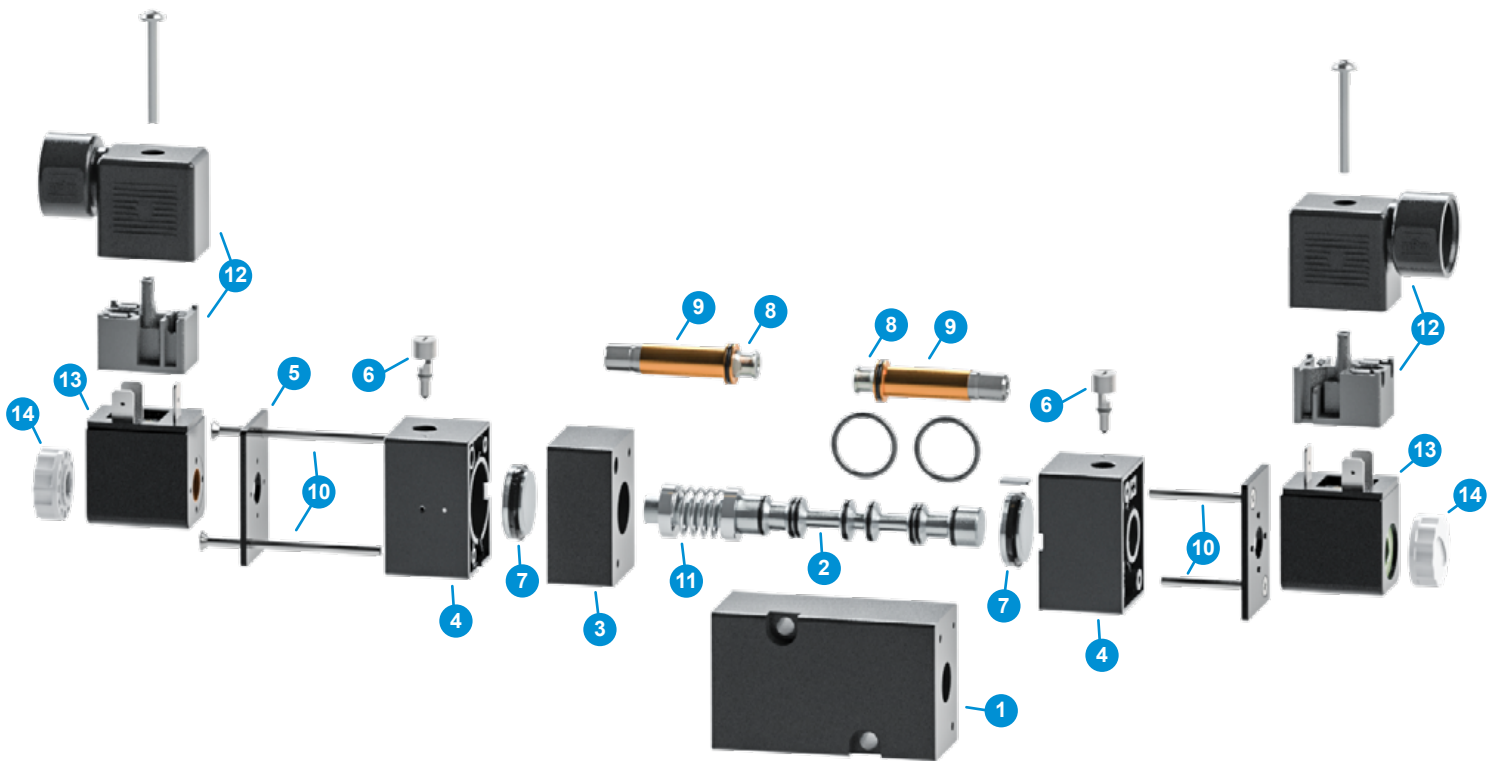


S3 Series Technical Data

Exploded View, Materials of Construction, & Dimensional Data

S3 Series

Exploded View & Bill of Materials



No.	DESCRIPTION	MATERIALS
1	Body	Aluminum
2	Spool Assembly	Aluminum / NBR
3	Spring Housing	Aluminum
4	Spool Valve Cap Assembly	Polypropylene
5	End Plate	Carbon Steel
6	Manual Button	Aluminum
7	Pilot Piston	Aluminum

No.	DESCRIPTION	MATERIALS
8	Armature	Iron
9	Armature Housing	Brass / Stainless Steel
10	End Plate Screw	Plated Steel
11	Spool Spring	Stainless Steel
12	Din	Materials Depend on Options Selected
13	Coil	Materials Depend on Options Selected
14	Coil Nut	Technopolymer

*Note: All exposed bare metal parts are painted.

Solenoid Valve Technical Brochure

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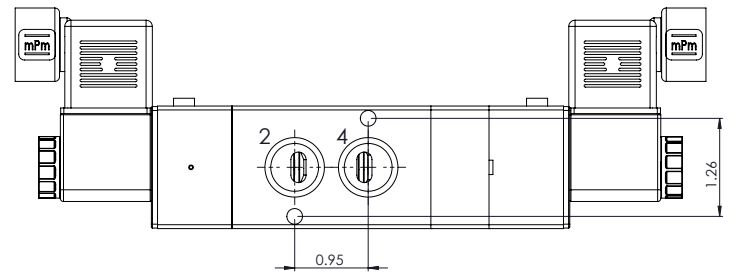
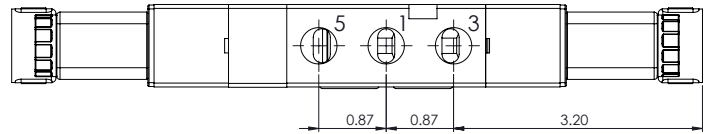
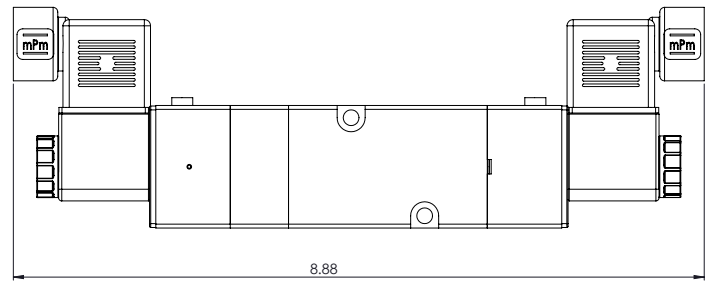
S3 Model 6

Data Sheet

TECHNICAL DATA

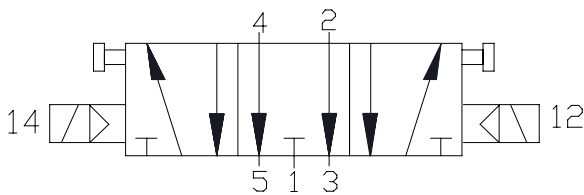
Standard voltages = 24 - 110 - 220V 50/60 Hz,
12 - 24V DC
Power input = 60 Hz inrush 9.4VA holding 6.9VA
Power input = DC 4.8W
Voltage tolerance = $\pm 10\%$
Coil insulation = class "F"
Duty cycle = 100%
Protection class = IP65
Air supply connection = 1/4" NPT
Operating pressure = min. 2 Bar (30 PSI) -
max. 8 Bar (120 PSI)
Din connector = 1/2" NPT
Flow factor = Cv 1.1
Max operating frequency = 600/1'
Room temperature limit = -4°F~158°F
Weight = 0.80 lb

DIMENSIONS

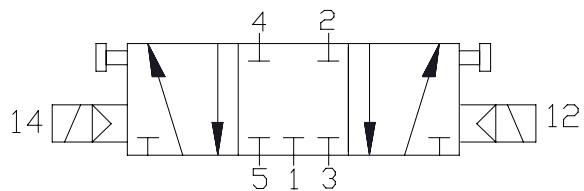


FLOW DIAGRAMS

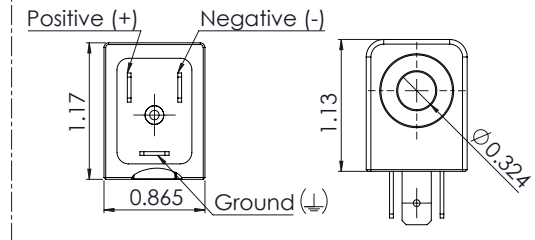
Open Center S36A



Closed Center S36C



COIL



Coils are polarity insensitive: Positive and Negative are interchangeable

S3 Series Technical Data (Cont.)

Exploded View, Materials of Construction, & Dimensional Data

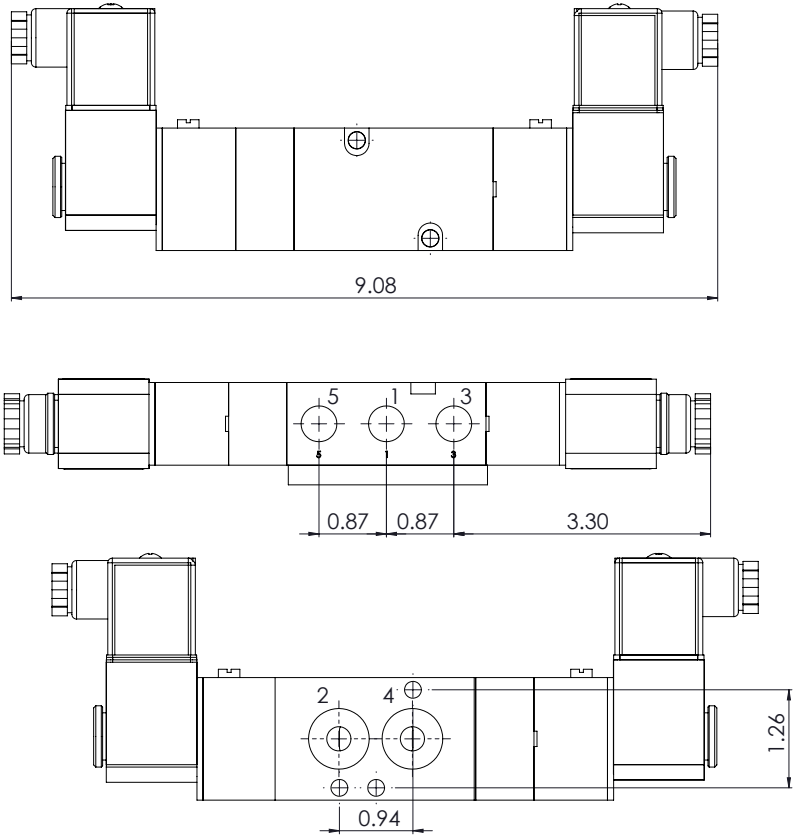
S3 Model 7

Data Sheet

TECHNICAL DATA

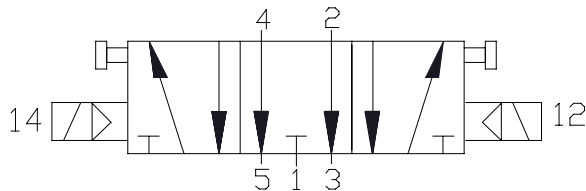
Standard voltages = 24V DC
 Power input = DC 1.6W
 Voltage tolerance = $\pm 10\%$
 Coil insulation = class "F"
 Duty cycle = 100%
 Protection class = IP65
 Intrinsically Safe Coil
 Air supply connection = 1/4" NPT
 Operating pressure = min. 2 Bar (30 PSI) -
 max. 8 Bar (115 PSI)
 Din connector = Strain Relief
 Flow factor = Cv 1.1
 Max operating frequency = 600/1'
 Room temperature limit = -4°F~122°F
 Weight = 0.80 lb
 V Max.= 28V DC
 I Max.= 115mA
 Max. Valve Pressure= 115 PSI
 Hazardous Location Class
 Class I: Groups A, B, C, and D
 Class II: Groups E, F, and G
 Class III: Div. I

DIMENSIONS

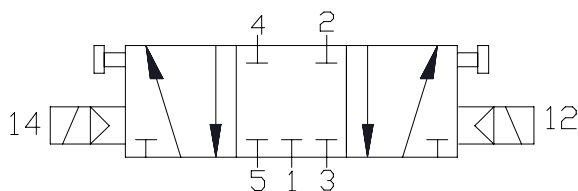


FLOW DIAGRAMS

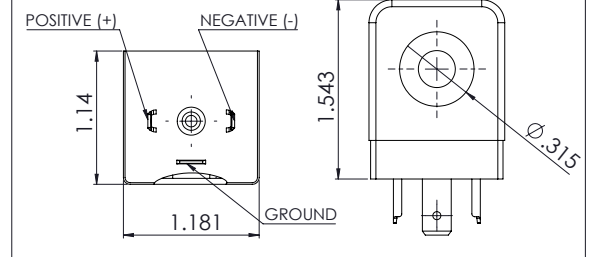
Open Center S37A



Closed Center S37C



COIL

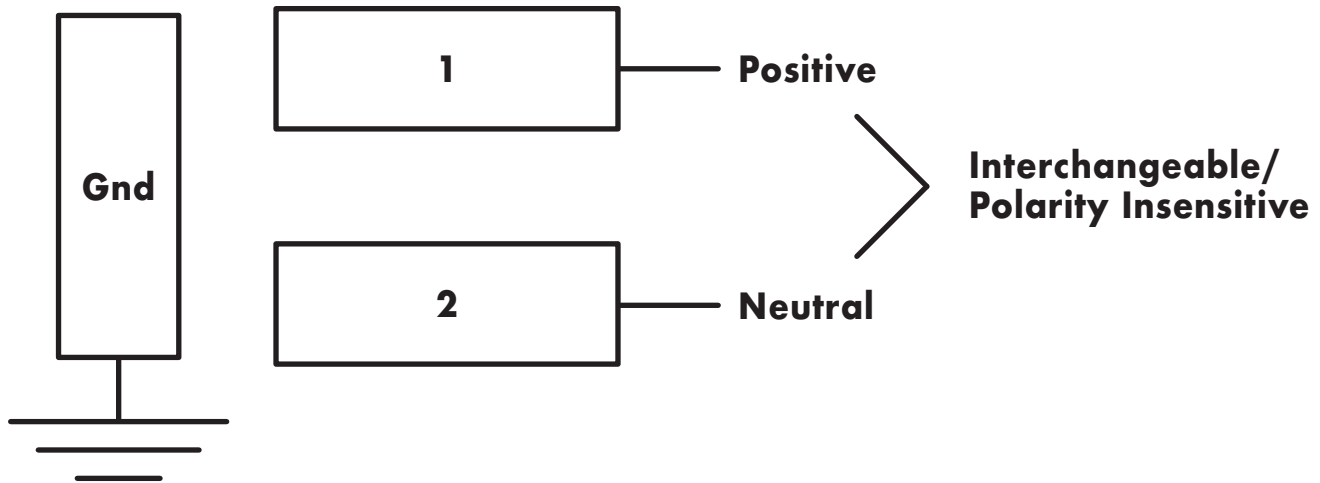


Coils are polarity insensitive: Positive and Negative are interchangeable

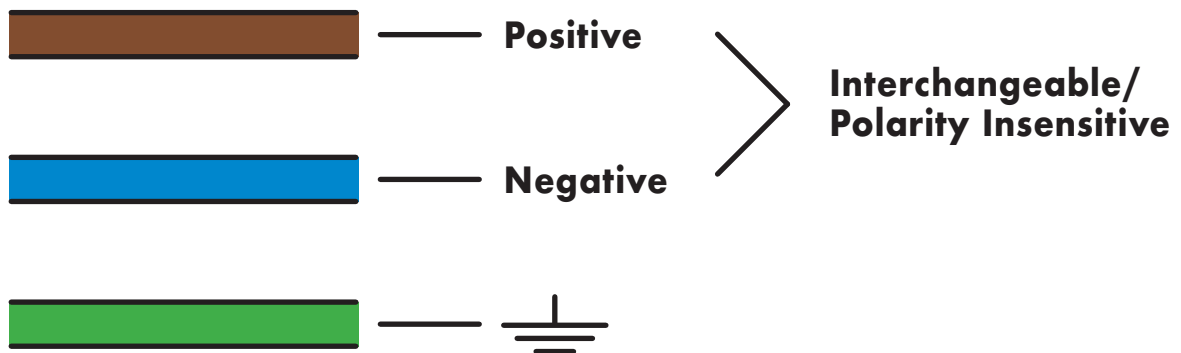
Wiring Diagrams

Diagrams for SV, NV, SSV, & S3 Series Solenoid Valves

DIN Connector Wiring Diagram



Flying Leads Wiring Diagram



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R: 11/02/23