

# VAX Series

## High Pressure 2-way/3-way Coaxial Valve



High pressure coaxial valves are the best choice in process and fluid control and combine performance, economy and availability.

### FEATURES

- Bi-directional compact design and NPT end connections.
- Fast actuation, high cycle life and maintenance free.
- Limit switches and solenoids available (pneumatic only).

### TYPICAL APPLICATIONS

- Vacuum and gaseous applications.
- Liquid, gelatinous and highly viscous media.
- High cycle applications.

### MATERIALS OF CONSTRUCTION

**Seats:**

PTFE.

**Seals:**

FPM.

**Control tube:**

Stainless steel.

**End Caps:**

Brass or stainless steel.

**Center Body Piston (non wetted):**

Aluminum (pneumatic) or nickel plated steel (electric).

**Bolts:**

Steel.

### TEMPERATURE RANGE

-4°F to 140°F

### VAX SERIES MODEL NUMBERING

Model Number: X VAX X X X X X

Size (NPT): \_\_\_\_\_

**B** = 3/8"

**C** = 1/2"

**D** = 3/4"

**E** = 1"

Material: \_\_\_\_\_

**B** = Brass

**S** = Stainless Steel

Configuration: \_\_\_\_\_

**2** = 2-way

**3** = 3-way (Brass Only)

Actuator Style: \_\_\_\_\_

**P** = Pneumatic

**E** = Electric

Fail Position: \_\_\_\_\_

**O** = Fail Open (2-way),  
Fail Port A To B (3-way)

**C** = Fail Closed (2-way),  
Fail Port A To C (3-way)

Voltage (Electric Only): \_\_\_\_\_

**A** = 110 VAC

**B** = 24 VDC

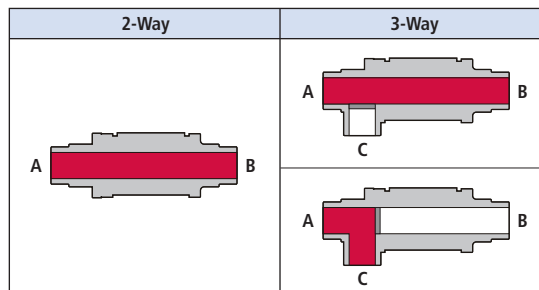
### MAXIMUM PRESSURE

ΔP 600 PSI: Pneumatic, A to B,  
A to C or B to A

ΔP 600 PSI: Electric, A to B  
or A to C

ΔP 180 PSI: Electric, B to A

### VALVE CONFIGURATIONS

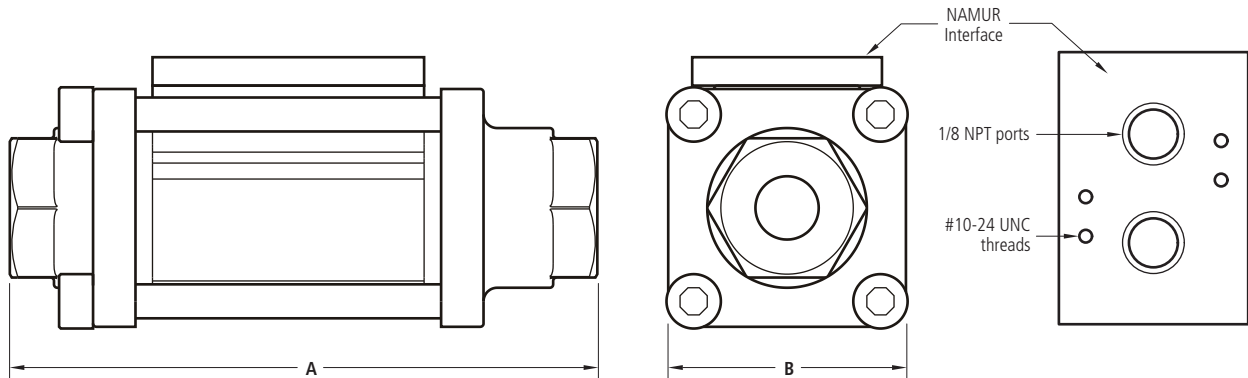


### CV FACTORS

Size	CV	
	A to B	A to C
<b>Pneumatic</b>		
3/8"	2.5	2.2
1/2"	6.1	4.5
3/4"	10.8	7.7
1"	15.0	12.7
<b>Electric</b>		
3/8"	2.5	1.8
1/2"	6.0	4.1
3/4"	8.6	6.4
1"	14.0	11.7

## VAX Series

High pressure 2-way coaxial valve  
(Pneumatic, spring return)



### DIMENSIONS, WEIGHTS & SPECIFICATIONS

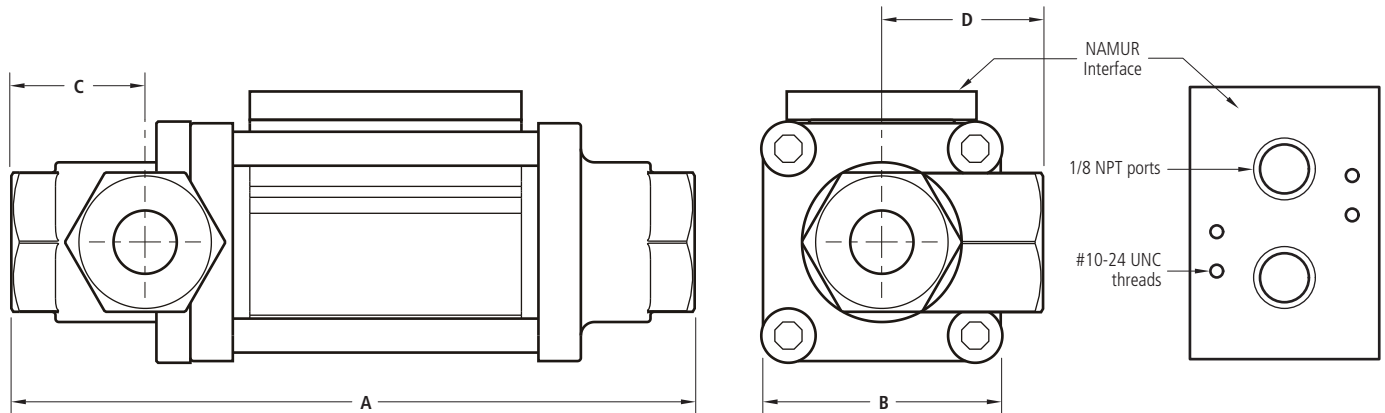
Size	A	B	Actuating Pressure (PSI)	Actuation Time (60 PSI line pressure)		Wt. (lbs.)	Model No.	
				Opening	Closing		Fail Open	Fail Closed
3/8"	5.71	1.97	60-120	30 ms	50 ms	2.87	BVAXS2PO	BVAXS2PC
1/2"	6.81	2.76	60-120	35 ms	60 ms	5.51	CVAXS2PO	CVAXS2PC
3/4"	7.60	3.15	60-120	40 ms	60 ms	8.38	DVAXS2PO	DVAXS2PC
1"	8.35	3.54	60-120	50 ms	70 ms	11.24	EVAXS2PO	EVAXS2PC

### VAX VALVE FEATURES

- Bi-directional compact design and NPT end connections.
- Fast actuation, high cycle life and maintenance free.
- NAMUR solenoid mounting pad.
- Limit switches and solenoids available.

## VAX Series

High pressure 3-way coaxial valve  
(Pneumatic, spring return)



### DIMENSIONS, WEIGHTS & SPECIFICATIONS

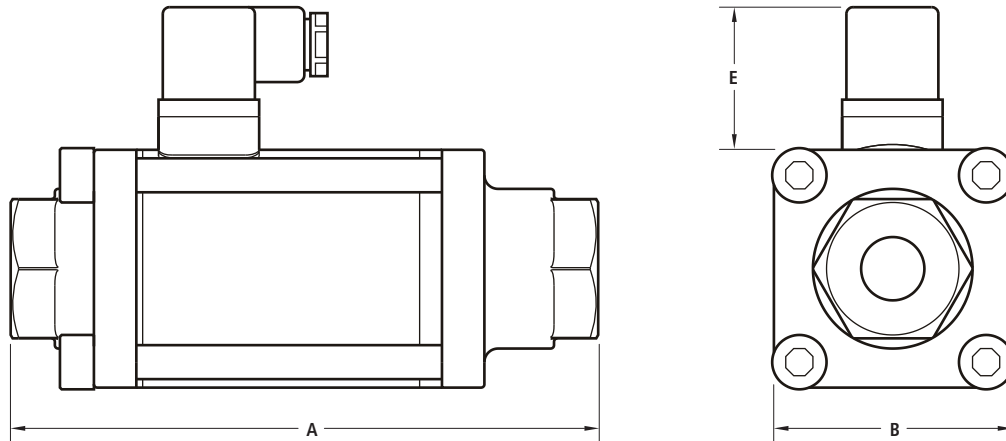
Size	A	B	C	D	Actuating Pressure (PSI)	Actuation Time (60 PSI line pressure)		Wt. (lbs.)	Model No.	
						Opening	Closing		Fail Open	Fail Closed
3/8"	6.54	1.97	1.26	1.46	60-120	30 ms	50 ms	3.31	BVAXB3PO	BVAXB3PC
1/2"	7.87	2.76	1.52	2.36	60-120	35 ms	60 ms	6.61	CVAXB3PO	CVAXB3PC
3/4"	9.02	3.15	1.79	2.83	60-120	40 ms	60 ms	9.70	DVAXB3PO	DVAXB3PC
1"	9.80	3.54	1.89	3.15	60-120	50 ms	70 ms	13.45	EVAXB3PO	EVAXB3PC

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- NAMUR solenoid mounting pad.
- Limit switches and solenoids available.

## VAX Series

High pressure 2-way coaxial valve  
(Electric, direct acting, spring return)



### DIMENSIONS, WEIGHTS & SPECIFICATIONS

Size	A	B	E		Current Consumption		Operating Time		Wt. (lbs.)	Model No.	
			AC	DC	AC	DC	Opening	Closing		Fail A to B	Fail B to A
3/8"	5.71	1.97	1.83	1.58	0.36 A	1.45 A	45 ms	70 ms	3.75	BVAXS2EO	BVAXS2EC
1/2"	6.81	2.76	1.83	1.58	0.41 A	2.1 A	60 ms	130 ms	8.16	CVAXS2EO	CVAXS2EC
3/4"	7.60	3.15	1.83	1.58	0.56 A	2.2 A	105 ms	150 ms	11.90	DVAXS2EO	DVAXS2EC
1"	8.35	3.54	1.83	1.58	0.62 A	2.5 A	150 ms	190 ms	15.65	EVAXS2EO	EVAXS2EC

© Voltage: **A** = 110 VAC; **B** = 24 VDC.

### VAX VALVE FEATURES

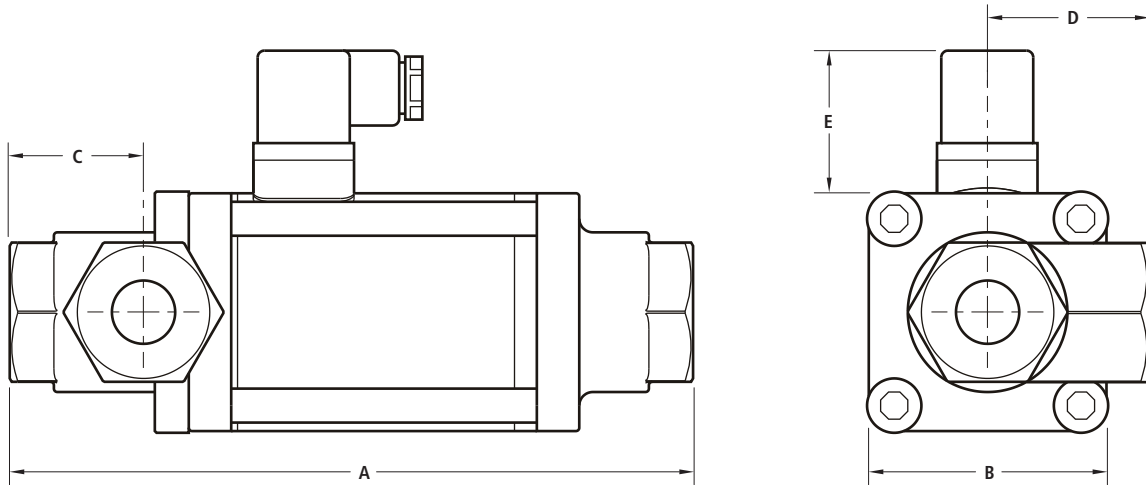
- Bi-directional compact design and NPT end connections.
- Fast actuation, high cycle life and maintenance free.
- IP 65 rating.

### ELECTRIC ACTUATOR FEATURES

- Electrical DIN cord grip connection: PG9, plug acc. DIN EN 175301-803 form A, LED.
- Insulation class H.
- IP 65 enclosure protection.
- Energized duty rating: ED 100%.

## VAX Series

High pressure 3-way coaxial valve  
(Electric, direct acting, spring return)



### DIMENSIONS, WEIGHTS & SPECIFICATIONS

Size	A	B	C	D	E		Current Consumption		Operating Time		Wt. (lbs.)	Model No.	
					AC	DC	AC	DC	Opening	Closing		Fail A to B	Fail B to A
3/8"	6.54	1.97	1.26	1.46	1.83	1.58	0.36 A	1.45 A	45 ms	70 ms	4.41	BVAXB3EO	BVAXB3EC
1/2"	7.87	2.76	1.52	2.36	1.83	1.58	0.41 A	2.1 A	60 ms	130 ms	9.04	CVAXB3EO	CVAXB3EC
3/4"	9.02	3.15	1.79	2.83	1.83	1.58	0.56 A	2.2 A	105 ms	150 ms	13.23	DVAXB3EO	DVAXB3EC
1"	9.80	3.54	1.89	3.15	1.83	1.58	0.62 A	2.5 A	150 ms	190 ms	17.86	EVAXB3EO	EVAXB3EC

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### VAX VALVE FEATURES

- Bi-directional compact design and NPT end connections.
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- IP 65 rating.

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- Electrical DIN cord grip connection: PG9, plug acc. DIN EN 175301-803 form A, LED.
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- IP 65 enclosure protection.
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