

2/2- 3/2-Way, NPT 3/8, NPT 1/2, NPT 3/4, G 3/8, G 3/4



Advantages/Benefits

- ▶ NPT 3/8, NPT 1/2, NPT 3/4, G 3/8, G 1/2, G 3/4, solvent joint
- ▶ On/off, mixer or distributor function
- ▶ Body materials: PVC, PVDF
- ▶ No differential pressure required for switching
- ▶ Double seal to valve interior
- ▶ Simple installation and removal
- ▶ Non-metallic valve internals
- ▶ Lockable manual override available as a standard feature

Design/Function

Direct-acting solenoid valve, available in 2- and 3-way versions. A separating diaphragm isolates the actuator from the fluid.

The valve is insensitive to contaminated fluids, except for sharp solid bodies and long fibers.

The flow path through the valve is dependent on the chosen circuit function. The solenoid epoxy encapsulation efficiently dissipates the heat generated by the coil.

Applications

- Aggressive gases and liquids
- Bases and acids up to a medium concentration
- Water treatment
- Chemical cleaning and washing systems
- Food and beverage industry
- Photochemistry
- Electroplating systems
- Chlorine dosage
- Etching technology

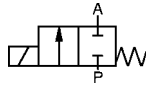
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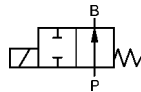
Technical Data

Circuit Function

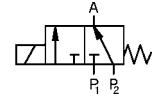
A 2/2-way valve,
normally closed



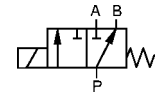
B 2/2-way valve,
normally open



E Mixer valve, when de-energized
pressure port P2 open,
P1 closed



F Distributor valve, when de-energized
pressure port P connected
to outlet B



Body material

Hard-PVC (resistant to DIN 8062 and 8061)

PVDF on request

Specifications

Orifice [inches]	C _v -Value Water [GPM]	Port Connection [NPT]	Pressure Range for Circuit Functions		A [PSI]	B [PSI]	Weight [lb.]
			F [PSI]	E [PSI]			
3/8"	2.33	3/8 or 1/2	0-14	0-9	0-42	0-28	2.64
9/16"	5.2 ¹⁾	1/2 or 3/4	0-7	0-4.2	0-14	0-14	2.64
3/4"	7.0 ¹⁾	3/4	0-3.5	0-2.0	0-7	0-7	2.64

¹⁾ The C_v-values of the orifice DN 9/16" and 3/4" are 0.588 or 1.176 m³/h smaller in the circuit functions E and F.

All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure.

Operating Data (Valve)

Seal Materials/Fluids Handled/Temp. -Range

		PVC	PVDF
NBR	Neutral fluids, e.g. compressed air, town gas, water, hydraulic oil, oils and fats without additives	14°F to 122°F	14°F to 158°F
EPDM	Alkalis, acids up to medium concentration, alkaline washing and bleaching lyes	-22°F to 122°F	-22°F to 158°F
FPM	Oxidizing acids and substances salt solutions, oils with additives	14°F to 122°F	-22°F to 158°F

For more detailed information see resistance chart (Leaflet-No. 1896009).

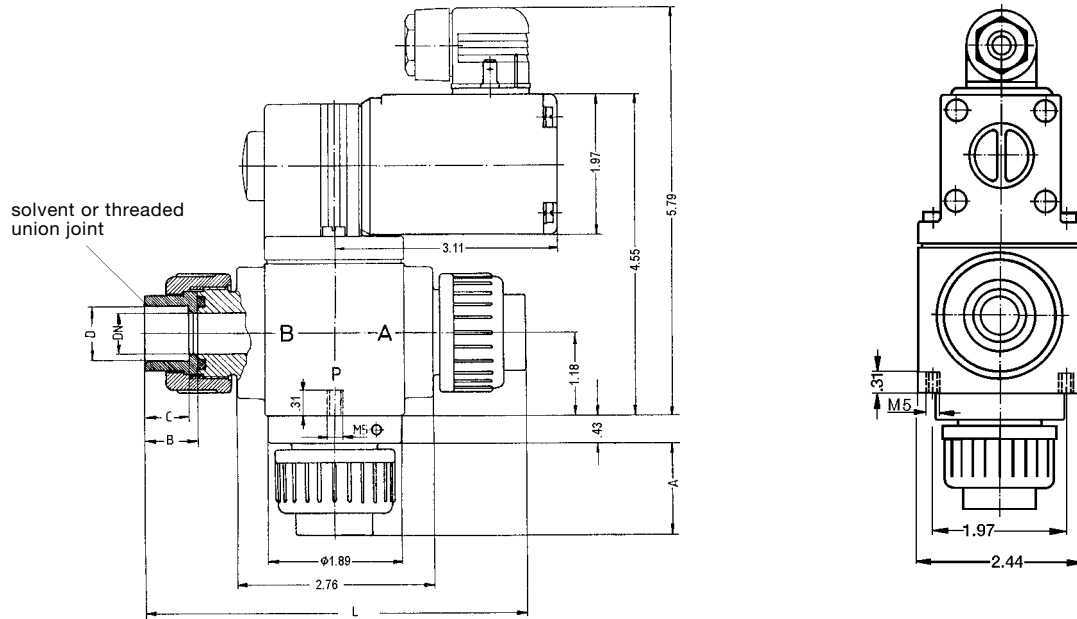
Max. ambient temperature	122°F
Max. viscosity	4x10 ⁻⁴ ft ² /sec
Response times	opening 10-20 ms closing 40-60 ms

The response times have been measured at a nominal pressure with air. They depend upon the orifice, pressure and viscosity of the handled fluid.

Operating Data (Actuator)

Operating voltage	24, 120, 240, 60 Hz Standard 12-440V, 50 or 60 Hz or UC Available (UC=universal current)
Voltage tolerance	±10 %
Power consumption	AC 100-120 VA (inrush), 32 VA/16 W (hold) UC 100 W (inrush), 9 W (hold)
Duty cycle	100% continuously rated
Cycling rate	standard coil: 100-150 c.p.m. UC coil: max. 6 c.p.m.
Rating	IP 65 cable plug
Port connection	G 3/8, 1/2, 3/4, NPT 3/8, 1/2, 3/4, solvent joint 16, 20 and 25 mm ø

Dimensions [inches]

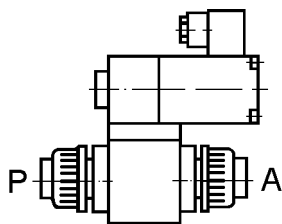


Circuit Function	Connections 3-Way-Valve		
F	B	A	P
E	P ₂	P ₁	A

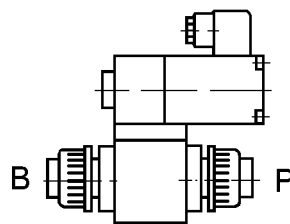
Orifice	A	B	C		D		L	
			Threaded Joint	Solvent Joint	Solvent Joint	Threaded Joint		
3/8"	1.18	.67	.55	.47	ø .64	G 3/8	-	5.12
	1.30	.75	.63	.55	ø .80	G 1/2	NPT 1/2	5.35
9/16"	1.30	.75	.63	.55	ø .80	G 1/2	NPT 1/2	5.35
	1.46	.87	.75	.63	ø .99	G 3/4	NPT 3/4	5.67
3/4"	1.46	.87	.75	.63	ø .99	G 3/4	-	5.67

Terminals

Installation/Accessories



Circuit function A, N/C version



Circuit function B, N/O version

Installation

as required

