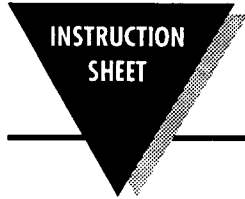


SV-1801

4-Way Solenoid Valve



M2193/0695

Unpacking Instructions

Remove the Packing List and verify that you have received all equipment, including the following (quantities in parentheses):

- SV-1801 4-Way Solenoid Valve (1)
- Operator's Manual (1)

If you have any questions about the shipment, please call the OMEGA Customer Service Department.

When you receive the shipment, inspect the container and equipment for signs of damage. Note any evidence of rough handling in transit. Immediately report any damage to the shipping agent.

NOTE

The carrier will not honor damage claims unless all shipping material is saved for inspection. After examining and removing contents, save packing material and carton in the event reshipment is necessary.

Available Models

Part Number	Port Connection (NPT)	C _v	Pressure Range ¹ (PSI)	Orifice Diameter (in)	Weight (lb)	Body Material
SV-1801	1/4	0.97	15-140	1/4	0.88	Plastic

¹) A pressure difference of at least 15 PSI is required to ensure operation.

Options

Ordering Suffix	Description
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Fluids Handled

Filtered and lubricated compressed air (reduced life on dry air operation). Minimum pressure differential required 1 bar. Pressure range as quoted on valve label. Maximum fluid and ambient temperatures 50°C.

Installation

Installation position as required. Ensure exhaust outlets for pilot valve and main valve remain unrestricted but protect against ingress of dust, water and foreign matter. Pipework should be clean, taper threaded fittings should be avoided. Max. thread depth is 12 mm. Pipework should be at least 6 mm I.D.; pipework should be supported and installed to prevent strain on valve body. Fittings should be sealed with PTFE tape, max. torque 8 Nm (max. 3 Nm for versions without brass thread inserts).

Valves can have installed M 6 screws, max. torque 2.5 Nm. Ensure that correct connections are made to ports P and R. Manifold mounting: Use screws M 5 x 60, O-rings 11 x 2.5 mm (incorporated in manifold) for sealing P and R connections.

Electrical Connection

Ensure voltage/frequency corresponds with that on the valve label. Voltage tolerance ± 10%. Make connection with an OMEGA cable plug. Flat terminal = earth; cable plug insert is 4 x 90° rotatable. Max. tightening torque for cable plug screw 1 Nm. Coils can be rotated at 90° intervals after loosening fixation screws. Note: Relocate valve body parts correctly.

Troubleshooting

Under normal operating conditions the valve is maintenance-free. Check port connections, operating pressure, electrical connection and supply voltage. A jammed armature on ac versions causes coil overheating. Remove coil and check movement of armature and spring. Inspect seals. Check that exhaust passages are clear. Make sure servo passages are clear. For spare parts see the reverse side.

see the reverse side.

Options

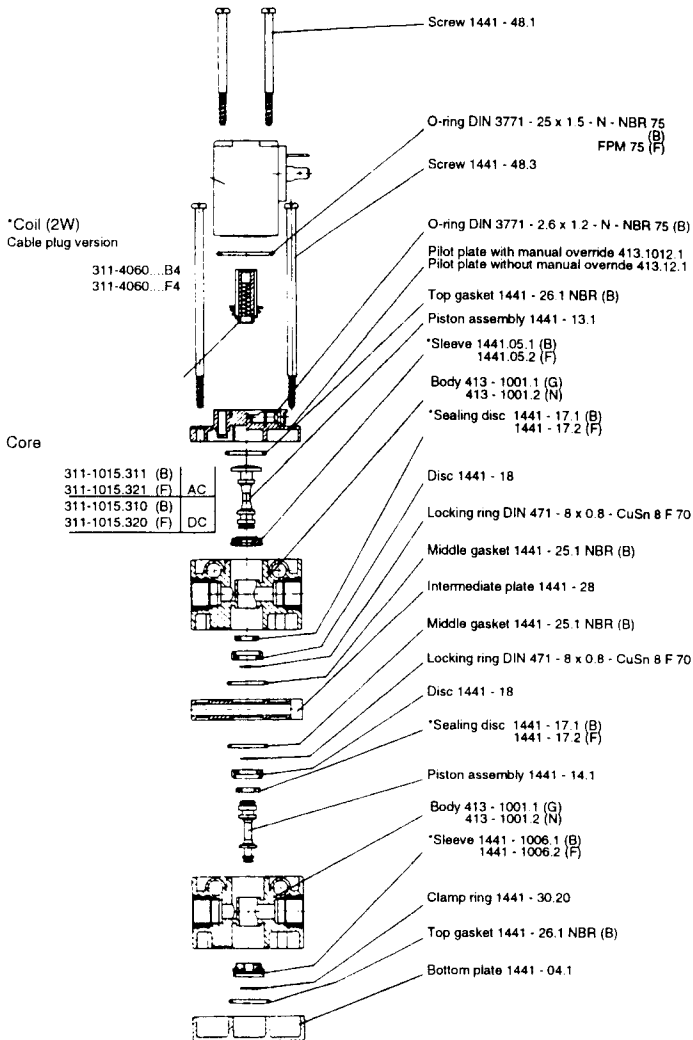
Ordering Suffix	Description
-24VDC	24 Vdc operation
-12VDC	12 Vdc operation
-240VAC	240 Vac operation

Description

The Model SV-1801 4-way solenoid valve is an internally piloted poppet valve with epoxy-encapsulated coil low power consumption, and high cycling rate. It features a high-quality plastic body with molded-in threaded bushings. Manual override is standard. Seal material is Buna-N. Temperature range is from -10 to 60°C (14 to 140°F). The valve is ideal for use with compressed air to actuate medium-sized cylinders and actuators. Electrical connection is by conduit plug.

SMS0695FVRA

Spare Parts



*Quote voltage/frequency and seal material
 **In case of FPM please replace .1 with .2

Specifications

Mounting Position:	Any (preferably with solenoid systems upright)
Max. Ambient Temp.:	54°C (130°F)
Voltage Tolerance:	±10%
Power Consumption in Warm State:	ac: 3.5 VA/2 W dc: 2 W
Opening Time (msec):	Approx. 50
Closing Time (msec):	Approx. 30
Cycling Rate:	Approx. 100-500 cpm (depending on operating pressure)
Duty Cycle:	Continuous (100%)
FM Approvals:	Nonincendive for hazardous locations Class I Div. 2 Group A, B, C, D; Class II Div. 2 Group F, G; Class III Div. 1 and 2; Operating Temperature T4A
Dimensions:	See below

