

RV500-101 & RV550-101

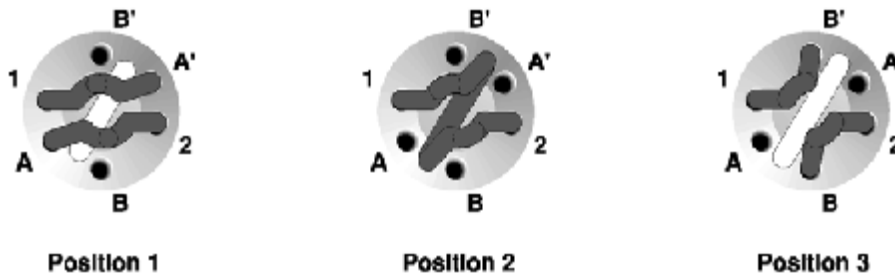
3-Position, 6-Port

Description

The RV500-101 is stainless steel 3-position, 6-port motorized valve. The RV550-101 is the PEEK version. The design includes an internal bypass passageway, and a unique patented TeleFLO® architecture that insures no unswept volume.

Flow Diagram

A schematic of the flow switching pattern of the valve is shown below. The six circles (some may be depicted under the dark slots) represent the ports in the valve stator. The dark slots represent the connecting passages in the rotor seal and stator face assembly. The white slot represents the internal bypass passageway located on the stator face assembly.



Specifications

Liquid Contacts: *RV500-101*, stainless steel and PEEK. *RV550-101*, PEEK.

Port Size: Accepts 10-32 male threaded fittings.

Flow Passage Diameters: 0.5-mm (.018") and 0.6mm (.024").

Volume in Flow Passages: *Stator* (includes stator face assembly)-1.6µL/hole and groove, *Rotor Seal*-0.6µL/groove, *Internal Bypass*-1.7µL/hole and long groove, 0.5µL/hole and short grooves.

Maximum Pressure: 35 MPa, 345 bar, 5000 psi.

Motor: Power train design includes a stepper motor and planetary gearing system.

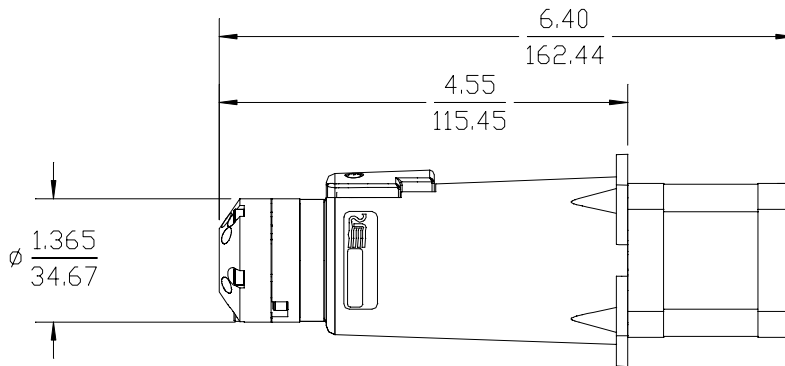
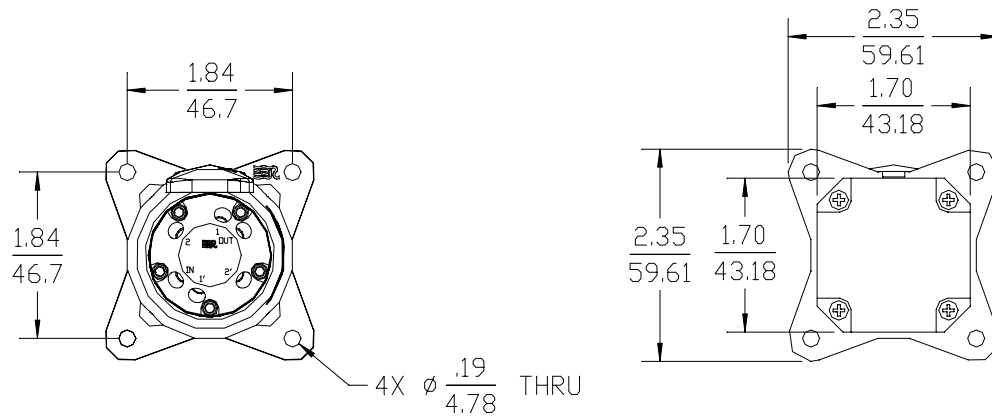
Motor Power Requirement: 24-35 VDC at 2.0 amps.

Position Sensors: Optoelectric position sensors with encoder wheels.

NOTE: Shipping, storing or operating this valve below 0°C with water in the fluid passages may cause failure of the sealing surfaces.

Dimensional Drawings on page 2

Dimensions are in inches/millimeters



ENCODER POSITION
FEEDBACK CONNECTOR
(MOLEX 50-57-9406)

+5VDC
SENSE 0
SENSE 1
SENSE 2
SENSE 3
GND

1
2
3
4
5
6

ORANGE	1	A+
BLACK/WHITE	2	A+
RED	3	B+
YELLOW/WHITE	4	B+
BLACK	5	A-
ORANGE/WHITE	6	A-
YELLOW	7	B-
RED/WHITE	8	B-

MOTOR CONTROLLER
LINES CONNECTOR
(MOLEX 22-01-2085)

