

# RV700-116 & RV750-116

## 12-Position, 13-port

### *Description*

RV700-116 is a stainless steel 12-position, 13-port motorized valve. The RV750-116 is the PEEK version.

### *Flow Diagram*

A schematic of the valve flow switching pattern is shown below. The numbered circles represent the ports in the valve stator and stator face assembly. The slots represent the connecting passages in the rotor seal. Incrementing the valve 30° lines up one of the 12 ports with the common port.



### *Specifications*

**Liquid Contacts:** *RV700-116*, Stainless steel and PEEK. *RV750-116*, PEEK

**Port Size:** Accepts 10-32 male threaded fittings

**Flow Passage Diameters:** 1.0-mm (.040")

**Volume in Flow Passages:** *Stator*- (includes stator face assembly)- *RV700-116*, 6.4-μL/hole, *RV750-116*-6.9-μL/hole, *Rotor Seal* -4.0-μL/groove

**Maximum Pressure:** 21 MPa, 207 bar, 3000 psi

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

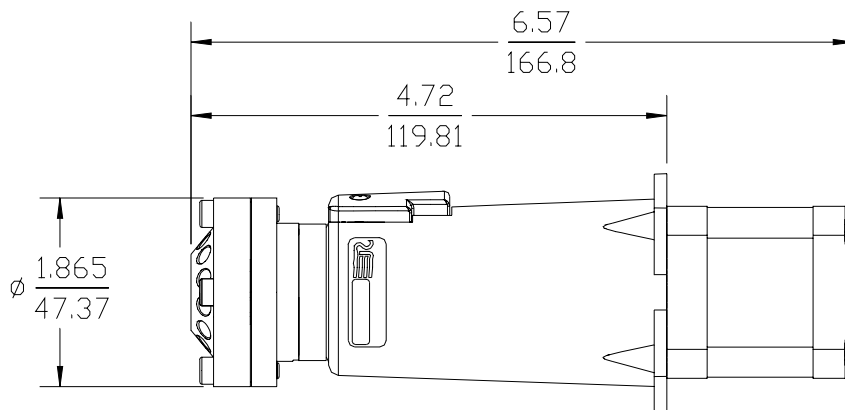
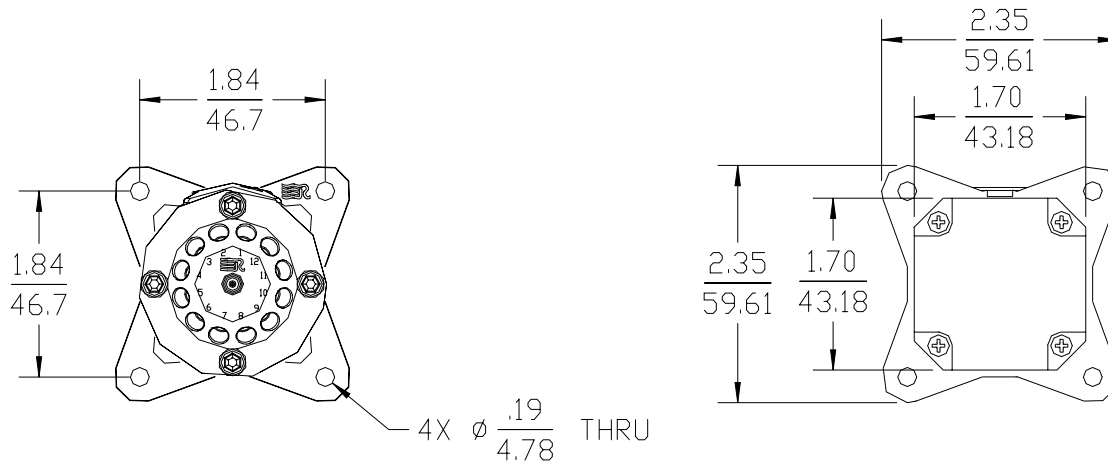
**Motor Power Requirements:** 24-35 VDC at 2.0 amps

**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.

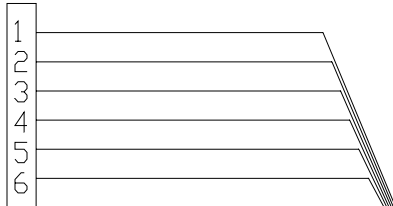
*Dimensional Drawings on page 2*

*Dimensions are in inches/millimeters*



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

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



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)

