

# EZ450-900-4

TitanEZ™

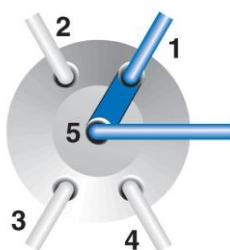
4-Position, 5-Port, Ceramic on Ceramic  
w/PEEK Stator and PCB

## Description

The EZ450-900-4 is a 4-Position, 5-Port ceramic-on-ceramic motorized valve. The valve has a PEEK stator with a Viton® gasket that insures a leak free seal between the PEEK and ceramic surfaces. Included with the valve is a Motor Driver/Valve Controller Board programmed for 4-line BCD control. The valve has a small footprint and is capable of millions of actuations due to the ceramic-on-ceramic dynamic surfaces.

## Flow Diagram

The flow switching pattern is shown below. Please note that this is a representation of the flow path and may not show the true position of the ports and grooves.



## Specifications

**Liquid Contacts:** Coated ceramic, PEEK, and Viton

**Connections:** Accepts ¼-28 male threaded fittings

**Flow Passage Diameters:** *Ceramic Stator Face:* 0.060" (1.52"); *Ceramic Rotor Seal:* 0.060" (1.52mm); *PEEK Stator:* 0.060" (1.52mm)

**Internal Volume:** 54.7µL

**Maximum Pressure:** 102psi (7bar)

**Motor:** 12 ohm, 7.5 degree stepper motor

**Motor Power Requirements:** 24VDC +5/-10% at 1.0 Amp max

**Motor Position Sensors:** Optoelectric position sensors with fixed 8 position encoder wheels

**Gear Reduction:** Dual

**RoHS-Compliant:** Yes

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

## Encoder Information

This 4 position valve uses an 8 position encoder, only the odd BCD codes are used.

BCD Code	Valve Position
1	1
3	2
5	3
7	4

Note: For information on developing your own PCB Driver please refer to the Motion Profile Development Assistance Package for TitazEZ, Rheodyne® document number 2321808.  
For information regarding using the Rheodyne® PCB, please refer to Rheodyne® document number 2321380, Driver/Controller Development Assistance Package for Rheodyne Titan and MV Driver Boards.

## Dimensional Drawings

Dimensions are in inches [millimeters]

