

# TitanEZ™

## EZ011-020-4

### 10-Position, 11-Port

#### Description

The EZ011-020-4 is a 10-position, 11-port ceramic-on-ceramic motorized valve. The valve is designed to be mounted on a manifold with a FFKM gasket that insures a leak free seal between the manifold and ceramic surface. 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 Path

The flow switching pattern of the valve is shown below. The 11 circles represent the ports in the valve stator. The dark slot represents the connecting passage in the rotor seal. The valve rotates 36° between positions. 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: TZP Ceramic with proprietary coating; FFKM

Flow Passage Diameters: - Stator: 0.060" (1.52 mm); Stator Face Seal: 0.060" (1.52 mm); Rotor Seal: .060" (1.52 mm)

Port to Port Volume: 30 µL

Maximum Pressure: 75 psi (5.2 bar)

Motor: 12-ohm, 7.5-degree stepper motor

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

Motor Position Sensors: Optoelectric position sensors with universal 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.

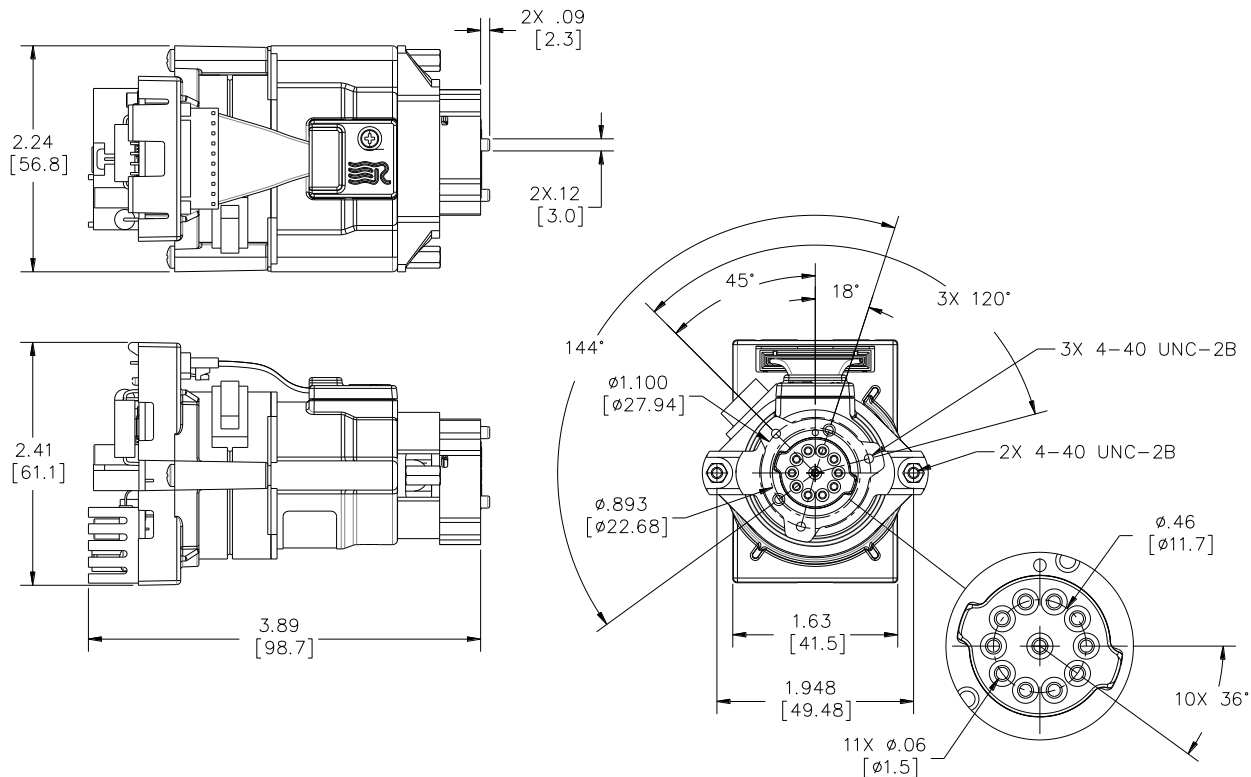
## Valve Control

For information on developing your own PCB Driver please refer to the Motion Profile Development Assistance Package for TitanEZ, 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)



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