



# TitanHP™

## MHP7986-500-1

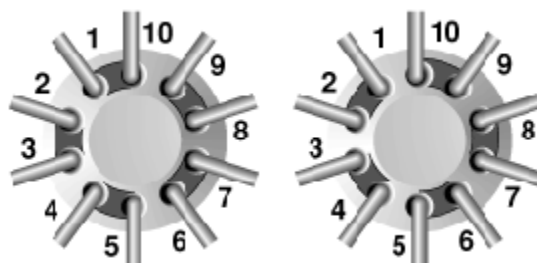
### 2-Position, 10-Port

#### **Description**

The MHP7986-500-1 is a 2-position, 10-port nano-scale motorized valve. This valve includes a circuit board. This board is referred to as the Motor Driver/Valve Controller Board and is programmed for 1-line level control. The design of this valve provides a small footprint.

#### **Flow Diagram**

A schematic of the valve flow switching pattern is shown below. The numbered circles represent the ports in the valve stator. The dark grooves represent the connecting passages in the rotor seal.



#### **Specifications**

**Liquid Contacts:** DuraLife®II

**Port Size:** Accepts M4 x .7 male threaded fittings

**Port to Port Volume:** 24nL

**Maximum Pressure:** 35 MPa (345 bar, 5000 psi).

**Motor:** 5 ohm, spark-free, 7.5 degree stepper motor

**Actuation Time:** 100ms

**Communication:** 1-Line Level Logic

**Drive Board Power Supply Requirements:** 24 VDC  $\pm$  5% at 1 Amp max

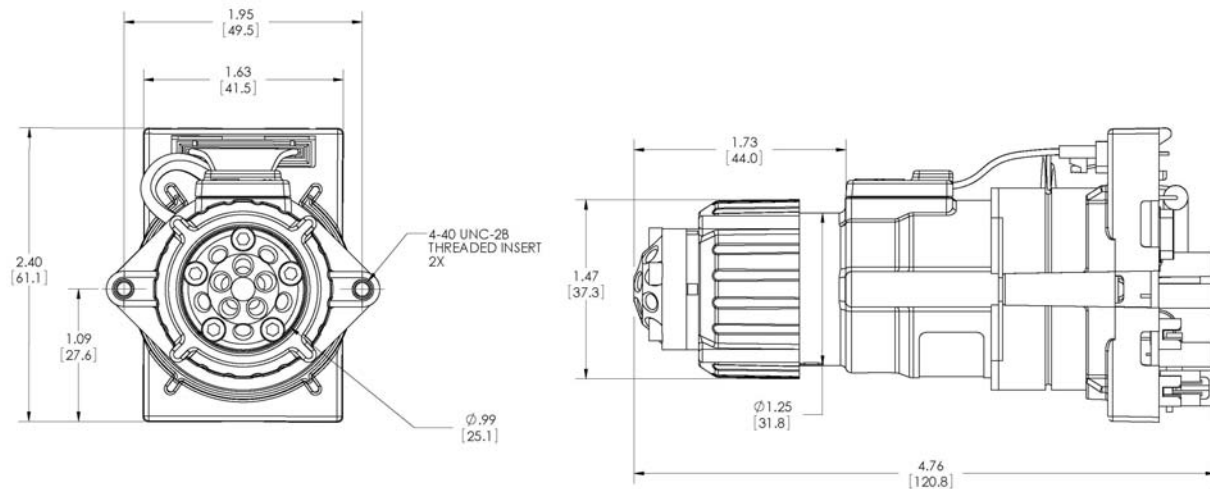
**Quiescent Current:** 20mA

**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.

Note: DuraLife is not recommended for use with solutions containing formic acid.

**Dimensional Drawings on page 2**  
**MHP7986-500-1**  
**Dimensions are in inches[millimeters]**



**Mounting Specifications:**

