

# ELECTRIC ACTUATED DIAPHRAGM VALVES



## Spears® Diaphragm Valve Premium Electric Actuation Package

This full-featured industrial grade valve is engineered to provide accurate throttling and shut off for chemical processing, industrial, and water treatment applications. Weir type design eliminates entrapped fluids in valve. Excellent for handling of liquids with suspended solids, viscous materials and slurries. Premium electric actuator utilizes a multi-turn reversing motor with UL approved, built in thermal overload protection and permanently lubricated gear train. 1/2" NPT conduit outlet. Standard 115 VAC, 60 Hz.



Typical Illustration

## Diaphragm Valve Specifications

|                 |   |
|-----------------|---|
| Style           | Diaphragm • Weir type<br>• fully repairable   |
| Material        | PVC, CPVC, UV Stabilized PP   |
| Size Range      | 1/2" - 8"   |
| Pressure Rating | PVC & CPVC<br>1/2" - 2" = 235 psi @ 73°F<br>1/2" - 4" Flanged = 150 psi @ 73°F<br>6" = 100 psi @ 73°F<br>8" = 75 psi @ 73°F<br>PP:<br>1/2" - 4" = 150 psi @ 73°F<br>6" = 100 psi @ 73°F<br>8" = 75 psi @ 73°F<br>With PTFE Diaphragm:<br>1/2" - 4" = 150 psi @ 73°F |
| Diaphragm       | EPDM, FKM, or elastomer backed PTFE   |
| End Connector   | PVC & CPVC =<br>True Union socket/threaded, or Spigot Body (1/2" - 2")<br>Flanged Body (1/2" - 8")<br>PP:<br>True Union threaded (1/2" - 2"),<br>Flanged Body (sizes 2-1/2" - 8")   |

## Standard 2-Position Actuator Specifications

|                             |                      |
|-----------------------------|----------------------|
| Motor                       | Multi-turn reversing |
| Thermal Overload Protection |                      |
| Voltage                     | 115 VAC, 60 Hz       |
| Lubrication                 | Permanent            |

## Sample Engineering Specification

All electrically actuated diaphragm valves shall be True Union Socket/Thread or Flanged or Spigot type constructed from PVC Type I Cell Classification 12454 or CPVC Type IV Cell Classification 23447 or UV Stabilized PP. All valve diaphragms shall be EPDM or FKM or Hypalon® or elastomer backed PTFE. All True Union valve union nuts shall have Buttress threads. All valve components shall be replaceable. All 1/2" through 2" valves shall be pressure rated to 235 psi, all 2-1/2" through 4" valves, 1/2" - 4" flanged valves and 1/2" - 4" PTFE diaphragm valves to 150 psi, all 6" valves to 100 psi, and all 8" valves to 75 psi for water at 73°F. Electric Actuators shall be factory installed, 115 VAC with thermally protected, reversing motor. Actuator shall be equipped with [selected options list] as manufactured by Spears® Manufacturing Company.

## Special Valve Options & Accessories

- Diaphragm & O-ring Replacement Kits
- Hypalon® (CSM) Diaphragms
- EPDM backed PTFE Diaphragms
- FKM backed PTFE Diaphragms

## Custom Electric Actuation Options & Accessories

- Declutchable Manual Override
  - Auxiliary Limit Switches
  - NEMA 7, 9 & NEMA 4X Enclosures
  - Position Indicator Lights (red/green)
  - Voltage Options: 12 VDC, 24 VDC, 24 VAC, 230 VAC
- (see Accessories & Options section for limitations)
- Custom ID Tags