#### **Actuated Valves Technical**

# **Electric Actuated Butterfly Valves**

## Spears® Butterfly Valve Premium Electric Actuation Package

Spears® innovative patented seat design departs from traditional liner-seat type valves to eliminate seat creep, reduce operating torque and provide positive seal off. Ideally suited for flow control or throttling, this high performance valve offers a full variety of options for greater application versatility. Fully isolated (Dry Stem), solid type 316 stainless steel with optional PTFE coated stems available for extra protection assurance. PVC and CPVC valves are available in Standard or True Lug style for sizes 1-1/2" through 14". Polypropylene valves are available in Standard valve style for sizes 1-1/2" through 24", plus sizes 30" through 60" produced to order. Premium electric actuator utilizes a reversing type motor with UL approved, built in thermal overload protection. Gear train is permanently lubricated 1/2" NPT conduit outlet. Standard 115 VAC connection.



**Typical Illustration** 

### **Butterfly Valve Specifications**

Style Flanged

Material PVC, CPVC, UV Stabilized PP Size Range PVC/CPVC = 1-1/2" - 12"

PP = 1-1/2" - 24" (custom 30" - 60"

Pressure Rating 1-1/2" - 12" =150 psi @ 73°F

14" = 100 psi @ 73°F 16" = 85 psi @ 73°F 18" = 70 psi @ 73°F

20" - 24" = 50 psi @ 73°F

Seats & Seals Buna-N, EPDM or FKM on PVC/CPVC valves; EPDM or FKM

on Polypropylene valves

Bolt Pattern ANSI Class 125/150

#### **Special Valve Options & Accessories**

- PVC & CPVC True-Lug valves w/ factory installed lugs
- PTFE coated stainless steel stem
- Titanium & Hastaloy Stems
- PTFE encased valve seat
- Field installable Lug Insert sets for PVC/ CPVC valves through 12"
- Stem Extensions
- Seat & Seal Replacement Kits
- 30"- 60" Polypropylene valves (contact Spears® for details)

### **Standard 2-Position Actuator Specifications**

- · Reversing Motor
- Permanent Lubrication
- Thermal Overload Protection
- 2-Position Operation with 2-SPDT Limit Switches
- Additional set dry contacts SPDT limit Switches
- NEMA 4 Enclosure, Powder Coated
- Basic Manual Override 1-1/2 through 4" (Declutchable Available)
- Declutchable Override 6" through 12"
- 115 VAC 60 Hz standard, optional voltages available
- Illuminated Position Indicator
- Heater

Note: Contact Spears® for information on valve sizes 14" and larger.

#### **Electric Actuation Options & Accessories**

- Modulating (variable positioning)
- Thermostat
- · Additional limit switch sets
- Feedback Potentiometer
- Transmitter
- LED Indicator lights
- Torque sensor
- Declutchable Manual Override
- Duty Cycle Upgrades (75% & 100%)
- NEMA 4x, 7, & 9 Enclosures
- Voltage Options: 24 VAC, 230 VAC, 12 VDC, 24 VDC (additional VOLTAGE options available by request)
- Custom ID Tag

### **Sample Engineering Specification**

All electrically actuated Butterfly valves shall be constructed from PVC Type I Cell Classification 12454 or CPVC Type IV Cell Classification 23447 or UV stabilized Polypropylene. All valve seats and O-rings shall be Buna-N, EPDM or FKM. Seat shall be a non-liner type interlocked to valve body. Bolt hole pattern shall conform to ANSI/ASME B16.5 CL 125/150. Disc shall be offset design with Type 316 stainless steel stem. Valves shall be pressure rated at [select from specification] 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.