Appendix C - Ball Valve Actuation Questionnaire Checklist

Return Fax To Tech Services: (818) 364-6945

Contact Name: _____ **Date:** _____

Business Name: _____

City: _____ **State:** _____ **Country:** _____

Phone: _____ **Fax:** _____ **E-mail:** _____

Project Name: _____

Ball Valves: **System Media Pressure (Required)** psi _____ kPa _____ Bar _____

Nominal Size in _____ mm _____ cm _____

Valve Quantity Each _____

Ball Valve Type :

- ☐ True Union Industrial
- ☐ True Union Standard
- ☐ Compact
- ☐ True Union Tee Style
- ☐ Other Valve Type _____
- ☐ Three Way Horizontal *(See 3-way orientation box below)*
- ☐ Three Way Vertical *(See 3-way orientation box below)*
- ☐ Tandem Three Way

Tandem 3-Way Orientation Document Required

Body Material :

- ☐ PVC
- ☐ CPVC
- ☐ Low-Extractable PVC

O-ring Seals :

- ☐ EPDM
- ☐ Viton®
- ☐ Other

(If Other Explain) _____

End Connector :

- ☐ Socket
- ☐ Threaded
- ☐ SR Threaded
- ☐ Flange
- ☐ Spigot
- ☐ Metric
  - ☐ DIN
  - ☐ JIS
  - ☐ BSP (Thread)

Vertical 3- Way Orientation

- ☐ Single L Port
- ☐ Double L Port
- ☐ Triple L Port
- ☐ T Port

Horizontal 3- Way Orientation

- ☐ L Port
- ☐ T Port

Pneumatic ☐

Not all combinations may be available.

FailSafe Type - *(Position to which valve cycles upon air loss)*

- ☐ Double Acting (No FailSafe. Stays in last activated position)
- ☐ Spring Return - Close (FailSafe in closed position upon air loss)
- ☐ Spring Return - Open (FailSafe in open position upon air loss)
- ☐ Other: _____

Operating Air Pressure (psi) - (*Compressed air supply required to operate actuator***)**

- ☐ 80-150 ☐ Other: _____

Override Type - (*Override used to cycle valve upon air loss* **)**

- ☐ Basic ☐ Declutchable ☐ Other: _____

Aux. Limit Switches- *(Additional mechanical switches to operate external lights, alarms etc. (set of 2)*

- ☐ SPDT- Mechanical ☐ SPDT - Proximity ☐ DPDT - Mechanical

Voltage Signal Type Specify Voltage: _____

Visual Indicator - (*Provides local visual valve position indication***)**

- ☐ Low Profile ☐ Dome ☐ No Indicator

Positioner Type - (*Positioner accepts an input signal from PLC to control valve cycle***).**

- ☐ **Pneumatic Positioner** *(Air supply required to operate valve)*

Signal Pressure - *(Air pressure required to position the valve)*

- ☐ 3-15 psi ☐ Other: _____
- ☐ **Electro-Pneumatic Positioner** *(Air and voltage supply required to operate)*

Signal Voltage Input ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

- ☐ With Transmitter - *(Sends output signal to PLC to provide valve position)*

Transmitter Output ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

NEMA Rating -*(Enclosure rating indicates level of ingress protection from fluids, solids and gases)*

- ☐ 4 ☐ 4x ☐ Other: _____

Solenoid Valve - *(Regulates actuator intake/exhaust air supply)*

- ☐ 3 & 4 Way ☐ Dual Coil (*Double Acting Actuators only*) ☐ Other: _____

Solenoid Valve Voltage

- ☐ 115 VAC ☐ 230 VAC ☐ Other: _____

NEMA Rating - (*Enclosure rating indicates level of ingress protection from fluids and solids***)**

- ☐ 4 ☐ 4x ☐ Other: _____

☐ **Other Options:** _____

Electric ☐

Not all combinations may be available.

- ☐ Basic Two Position (90 Degree Travel Standard)
- ☐ 3 Position 90 ☐ 180 ☐

FailSafe Position (if required)

- ☐ Fail Open -FailSafe in open position upon power loss
- ☐ Fail Close-FailSafe in closed position upon power loss

Note: On "Fail Safe" Options Two Positions ONLY Override Not Recommended.

Voltage Supply Power:

- ☐ 115 VAC ☐ 230 VAC ☐ Other: _____

Frequency ☐ 50 Hertz ☐ 60 Hertz

Phase ☐ Single ☐ Three

Override Type - (*Override used to cycle valve upon power loss* **)**

- ☐ Basic ☐ Declutchable ☐ Other: _____

Duty Cycle *(Amount of work valve can accomplish before requiring rest)*

- ☐ 25% ☐ 75% ☐ Other/Min. Requirement : _____

NEMA Rating - (*Enclosure rating indicates level of ingress protection from fluids and solids***)**

- ☐ 4 ☐ 4x ☐ Other: _____

Positioner Type - *(Positioner accepts an input signal from PLC to control valve cycle)*

- ☐ **Positioner with Transmitter**

Signal Input ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

Transmitter -*(Sends output signal to PLC to provide valve position)*

Signal Output ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

- ☐ **Positioner - NO Transmitter**

Signal Input ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

Auxiliary Limit Switches(*Additional mechanical switches to operate external lights, alarms etc.)*

- ☐ 2 ☐ 4 *(Set of 2 each)*

Standard Accessories -All options not available in all actuator combinations

- ☐ Torque Sensor
- ☐ Friction Brake
- ☐ Battery Backup
- ☐ LED Indicating Lights (red /green)
- ☐ Speed Control
- ☐ 2 Wire Control Relay
- ☐ Heater & Thermostat ☐ [On @ 41F] [Off @ 60.8F] ☐ [On @ 69.8F] [Off @ 89.6F] ☐ [On @ 62.6F] [Off @ 80.6F]

☐ **Other Options:** _____

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Appendix C - Butterfly Valve Actuation Questionnaire Checklist

Return Fax To Tech Services: (818) 364-6945

Contact Name: _____ **Date:** _____

Business Name: _____

City: _____ **State:** _____ **Country:** _____

Phone: _____ **Fax:** _____ **E-mail:** _____

Project Name: _____

Butterfly Valves: **System Media Pressure (Required)** psi _____ kPa _____ Bar _____

Nominal Size in _____ mm _____ cm _____

Valve Quantity Each _____

Butterfly Valve Type :

- ☐ Standard
- ☐ True Lug
- ☐ Pool Valve
- ☐ Wafer
- ☐ Other Valve Type _____
- ☐ Tandem Diverting
- ☐ Tandem Three Way

(Tandem 3-Way Orientation Document Required)

Body Material :

- ☐ PVC
- ☐ CPVC
- ☐ Polypropylene

O-ring Seals :

- ☐ Buna- N
- ☐ EPDM
- ☐ Viton®
- ☐ Other

(If Other Explain) _____

Lug Materials :

- ☐ SS316
- ☐ Zinc

☐ Other Information: _____

Pneumatic ☐

Not all combinations may be available.

FailSafe Type - *(Position to which valve cycles upon air loss)*

- ☐ Double Acting (No FailSafe. Stays in last activated position)
- ☐ Spring Return - Close (FailSafe in closed position upon air loss)
- ☐ Spring Return - Open (FailSafe in open position upon air loss)
- ☐ Other: _____

Operating Air Pressure (psi) - *(Compressed air supply required to operate actuator)*

☐ 80-150 ☐ Other: _____

Override Type - *(Override used to cycle valve upon air loss)*

☐ Basic ☐ Declutchable ☐ Other: _____

Aux. Limit Switches- *(Additional mechanical switches to operate external lights, alarms etc. (set of 2)*

☐ SPDT- Mechanical ☐ SPDT - Proximity ☐ DPDT - Mechanical

Voltage Signal Type Specify Voltage: _____

Visual Indicator - *(Provides local visual valve position indication)*

☐ Low Profile ☐ Dome

Positioner Type - *(Positioner accepts an input signal from PLC to control valve cycle).*

☐ **Pneumatic Positioner** *(Air supply required to operate valve)*

Signal Pressure - *(Air pressure required to position the valve)*

☐ 3-15 psi ☐ Other: _____

☐ **Electro-Pneumatic Positioner** *(Air and voltage supply required to operate)*

Signal Voltage Input ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

☐ With Transmitter - *(Sends output signal to PLC to provide valve position)*

Transmitter Output ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

NEMA Rating - *(Enclosure rating indicates level of ingress protection from fluids, solids and gases)*

☐ 4 ☐ 4x ☐ Other: _____

Solenoid Valve - *(Regulates actuator intake/exhaust air supply)*

☐ 3 & 4 Way ☐ Dual Coil *(Double Acting Actuators only)* ☐ Other: _____

Solenoid Valve Voltage

☐ 115 VAC ☐ 230 VAC ☐ Other: _____

NEMA Rating - *(Enclosure rating indicates level of ingress protection from fluids and solids)*

☐ 4 ☐ 4x ☐ Other: _____

☐ **Other Options:**

_____

_____

Electric ☐

Not all combinations may be available.

☐ Basic Two Position (90 Degree Travel Standard)

FailSafe Position (if required)

- ☐ Fail Open - Open (FailSafe in open position upon power loss)
- ☐ Fail Close - Close (FailSafe in closed position upon power loss)

Note: On "Fail Safe" options two positions ONLY Override Not Recommended.

Voltage Supply Power:

☐ 115 VAC ☐ 230 VAC ☐ Other: _____

Frequency ☐ 50 Hertz ☐ 60 Hertz

Phase ☐ Single ☐ Three

Override Type - *(Override used to cycle valve upon power loss)*

☐ Basic ☐ Declutchable ☐ Other: _____

Duty Cycle *(Amount of work valve can accomplish before requiring rest)*

☐ 25% ☐ 75% ☐ Other/Min. Requirement: _____

NEMA Rating - *(Enclosure rating indicates level of ingress protection from fluids and solids)*

☐ 4 ☐ 4x ☐ Other: _____

Positioner Type - *(Positioner accepts an input signal from PLC to control valve cycle)*

☐ **Positioner with Transmitter**

Signal Input ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

Transmitter -*(Sends output signal to PLC to provide valve position)*

Signal Output ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

☐ **Positioner - NO Transmitter**

Signal Input ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

Auxiliary Limit Switches*(Additional mechanical switches to operate external lights, alarms etc.)*

☐ 2 ☐ 4 *(Set of 2 each)*

Standard Accessories -All options not available in all actuator combinations

- ☐ Torque Sensor
- ☐ Battery Backup
- ☐ Speed Control
- ☐ Heater & Thermostat ☐ [On @ 41F] [Off @ 60.8F] ☐ [On @ 69.8F] [Off @ 89.6F] ☐ [On @ 62.6F] [Off @ 80.6F]
- ☐ Torque Sensor
- ☐ LED Indicating Lights (red /green)
- ☐ 2 Wire Control Relay

☐ **Other Options:**

_____

_____

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Appendix C - Diaphragm Valve Actuation Questionnaire Checklist

Return Fax To Tech Services: (818) 364-6945

Contact Name: _____ **Date:** _____

Business Name: _____

City: _____ **State:** _____ **Country:** _____

Phone: _____ **Fax:** _____ **E-mail:** _____

Project Name: _____

Diaphragm Valves: **System Media Pressure (Required)** psi _____ kPa _____ Bar _____

Nominal Size in _____ mm _____ cm _____

Valve Quantity Each _____

Diaphragm Valve Type :

- ☐ EPDM
- ☐ Viton®
- ☐ PTFE/Viton®
- ☐ PTFE/EPDM
- ☐ Other Valve Type _____

Body Material :

- ☐ PVC
- ☐ CPVC
- ☐ Low-Extractable PVC
- ☐ Polypropylene

End Connector O-rings 1/2" - 2":

- ☐ EPDM
- ☐ Viton®
- ☐ PTFE/Viton®
- ☐ PTFE/EPDM
- ☐ Other

(If Other Explain) _____

End Connector :

- ☐ Socket
- ☐ SR Threaded
- ☐ Flange
- ☐ Spigot

☐ Other information: _____

Not all combinations may be available.

☐ **Unitized Pneumatic**

☐ **Pneumatic**

FailSafe Type *-(Position to which valve cycles upon air loss)*

- ☐ Double Acting (No FailSafe. Stays in last activated position)
- ☐ Spring Return - Close (FailSafe in closed position upon air loss)
- ☐ Spring Return - Open (FailSafe in open position upon air loss)
- ☐ Other: _____

Operating Air Pressure (psi) - *(Compressed air supply required to operate actuator)*

☐ 80-116 ☐ Other: _____

Override Type - *(Override used to cycle valve upon air loss. Not available in sizes 1/2" -2")*

☐ Basic ☐ Declutchable ☐ Other: _____

Aux. Limit Switches- *(Additional mechanical switches to operate external lights, alarms etc. (set of 2)*

☐ SPDT- Mechanical ☐ SPDT - Proximity ☐ DPDT - Mechanical

Voltage Signal Type: Specify Voltage: _____

Visual Indicator - *(Provides local visual valve position indication)*

☐ Low Profile ☐ Dome

Positioner Type - *(Positioner accepts an input signal from PLC to control valve cycle).*

☐ **Pneumatic Positioner** *(Air supply required to operate valve)*

Signal Pressure - *(Air pressure required to position the valve)*

☐ 3-15 psi ☐ Other: _____

☐ **Electro-Pneumatic Positioner** *(Air and voltage supply required to operate)*

Input ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

☐ With Transmitter - *(Sends output signal to PLC to provide valve position)*

Transmitter Output ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

NEMA Rating -*(Enclosure rating indicates level of housing ingress protection from fluids and solids)*

☐ 4 ☐ 4x ☐ Other: _____

Solenoid Valve - *(Regulates actuator intake/exhaust air supply)*

☐ 3 way (Air-to-Spring) ☐ 4 way *(Double Acting Actuators only)* ☐ Other: _____

Solenoid Valve Voltage

☐ 115 VAC ☐ 230 VAC ☐ Other: _____

NEMA Rating -*(Enclosure rating indicates level of ingress protection from fluids, solids and gases)*

☐ 4 ☐ 4x ☐ Other: _____

☐ **Other Options:** _____

_____

Not all combinations may be available.

☐ **Electric Multi Turn**

Voltage Supply Power:

☐ 115 VAC ☐ 230 VAC ☐ Other: _____

Frequency ☐ 50 Hertz ☐ 60 Hertz

Phase ☐ Single ☐ Three

Override Type - *(Override used to cycle valve upon power loss)*

☐ Basic ☐ Declutchable ☐ Other: _____

Duty Cycle *(Amount of work valve can accomplish before requiring rest)*

☐ 25% ☐ 75% ☐ Other: _____

NEMA Rating - *(Enclosure rating indicates level of ingress protection from fluids and solids)*

☐ 4 ☐ 4x ☐ Other: _____

Positioner Type - *(Positioner accepts an input signal from PLC to control valve cycle)*

☐ **Positioner with Transmitter**

Signal Input ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

Transmitter -*(Sends output signal to PLC to provide valve position)*

Signal Output ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

☐ **Positioner - NO Transmitter**

Signal Input ☐ 4-20mA ☐ 0-10 VDC ☐ Other: _____

Auxiliary Limit Switches *(Additional mechanical switches to operate external lights, alarms etc.)*

☐ 2 ☐ 4 *(Set of 2 each)*

Standard Accessories -All options not available in all actuator combinations

- ☐ Torque Sensor
- ☐ Battery Backup
- ☐ LED Indicating Lights (red /green)
- ☐ Speed Control
- ☐ 2 Wire Control Relay
- ☐ Heater & Thermostat ☐ [On @ 41F] [Off @ 60.8F] ☐ [On @ 69.8F] [Off @ 89.6F] ☐ [On @ 62.6F] [Off @ 80.6F]

☐ **Other Options:** _____

_____

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