

# ROBO-CONTROL

## SPECIFICATIONS MODEL U ACTUATOR

### AUTOMATIC CONTROL FOR CYLINDER VALVES

#### OPERATION

The Model U is an actuator system to automatically open and close the valve on chlorine or sulfur dioxide cylinders.

The system includes a battery operated actuator with electric motor that rotates the valve stem toward open or closed position for alignment, tests, and remote operation. The actuator is designed to mount without interfering with or requiring yokes or additional adaptors for dispensers or discharging hardware. The motor, gears, and controls are assembled as one unit.

#### CAPABILITIES

- ◆ Battery operated with automatic charger
- ◆ Optional integral leak detection for automatic shutdown
- ◆ Remote control by leak detector, panic button, or other digital signals such as PLC or computer
- ◆ Easy to mount or dismount to valve
- ◆ **Can be used on chlorine and sulfur dioxide 150#-cylinders or ton containers**
- ◆ Can be part of an automatic changeover system to permit only one container in service at a time
- ◆ Eliminates the need for scrubbers in certain applications per the Uniform Fire Code

#### FEATURES

The system includes a remote power supply enclosure for trickle charge of the SLA batteries. Engaging the actuator can be accomplished by tilting the actuator, resting actuator on valve and repositioning to the same plane as the valve stem. Monitor and controls are accomplished with a microprocessor and integral LED displays for CLOSED, ALIGN, and OPEN. The LED display enables the operator to easily read the condition when mounted outdoors with bright sunlight. Programming is accomplished through an integral keypad. Valve position is transmitted to the microprocessor from a direct-coupled potentiometer and displayed in Degrees Open.

#### ADDITIONAL INFO

Inputs for remote control can include "open", "close", and "latch close". Outputs for remote indication can include "valve open", "valve closed", "failure or battery", and "leak".

For information on more actuators that open and close ton cylinders refer to Specification **Model 2000C**.



#### DETAILS

Enclosure	NEMA 4X
Battery	Two 12-Volt SLA
Charger	120/240 VAC, 1 Amp Automatic
Indicator	Three digit .5" LED
Inputs	Maximum three
Outputs	Maximum four
Remote	Wired Power Enclosure
Rotation	Programmable up to 360 degrees
Materials	Fiberglass, stainless steel, steel, brass, RF Nylon
Actuator wt.	9 Pounds
Torque	20 ft/pounds for test 40 ft/pounds for safety close
Compatibility	Chlorine Institute 110 and Conforms to CI Publication

**"RECOMMENDATIONS FOR  
EMERGENCY CLOSURE  
DEVICES FOR CONTAINER  
VALVES"**

# Model Number Breakdown

MODEL NUMBER ITEMS AND OPTIONS							
A	B	-	C	D	E	F	G
MODEL U	-	-	-	-	-	-	-

ITEM	OPTION	DESCRIPTION
<b>B</b> STANDARD EQUIPMENT	150	Base price includes actuator with hardware to mount on 150# cylinder, manual open and close, LED display for indication of closed, open, align, failed, and latched closed.
	2000	Base price includes actuator with hardware to mount on ton cylinder, manual open and close, LED display for indication of closed, open, align, failed, and latched closed.
<b>C</b> REMOTE CONTROL PANEL (RCP)	X	Specify number of actuators required. One remote control panel to be furnished to accommodate number of actuators. (Note 3 and Note 6)
<b>D</b> INPUTS	0	Base with terminals for contact closure input, cable entry is CGB
	1	Three, wired with quick connect/disconnect (Note 2 and Note 5)
<b>E</b> OUTPUTS	0	None
	1	Four, wired with quick connect/disconnect (Note 5)
<b>F</b> LEAK DETECTION	0	None
	1	Integral leak detector with automatic close (Specify chlorine or sulfur dioxide)
<b>G</b> OPTIONAL REMOTE DEVICES	0	None
	X	Remote Box with ALL-CLOSE Pushbutton (Specify number required)

\*NOTE 1 - The term "Latched Closed" represents the action of the actuator after receiving a remote contact closure to "close-all". The actuator closes the valve and will not respond to other signals until an acknowledgement is made on the actuator keypad.

\*NOTE 2 - Integral leak detector is required for remote open option

\*NOTE 3 - Shielded cable furnished (30')

\*NOTE 4 - Spares must be ordered separately and may include:

Part # LD001 - Chlorine Sensor, 100 PPM

Part # LD003 - Sulfur dioxide Sensor, 100 PPM

Part # BA012-5 (5 Amp) or BA012-7 (7 Amp) SLA Battery

Part # FS001 - Fuse (Package of 5)

\*NOTE 5 - When wired inputs and outputs are required, select D=1 and E=1.

\*NOTE 6 - The remote control panel includes output relay for remote alarm signal, power light, and ALL-CLOSE pushbutton.

EXAMPLE: The number "Model U150-21111" represents a system with two actuators and one remote control panel for two actuators. The system provides three inputs, four outputs, and leak detection for each actuator. In addition, one remote ALL-CLOSE pushbutton box is furnished.

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