

The Solution

High Capacity Vacuum Induction Chemical Feed System

Model-CN03

Adjustable Output 0- 4,572 gpd max

Professional Series

Installation Guide and Owners Product Manual

SureWater Technologies, Inc.

348 N. Park Ave
Winter Garden, FL 34787
USA

US Patent No. 6,752,930

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I Installation

1. Prior to Installation

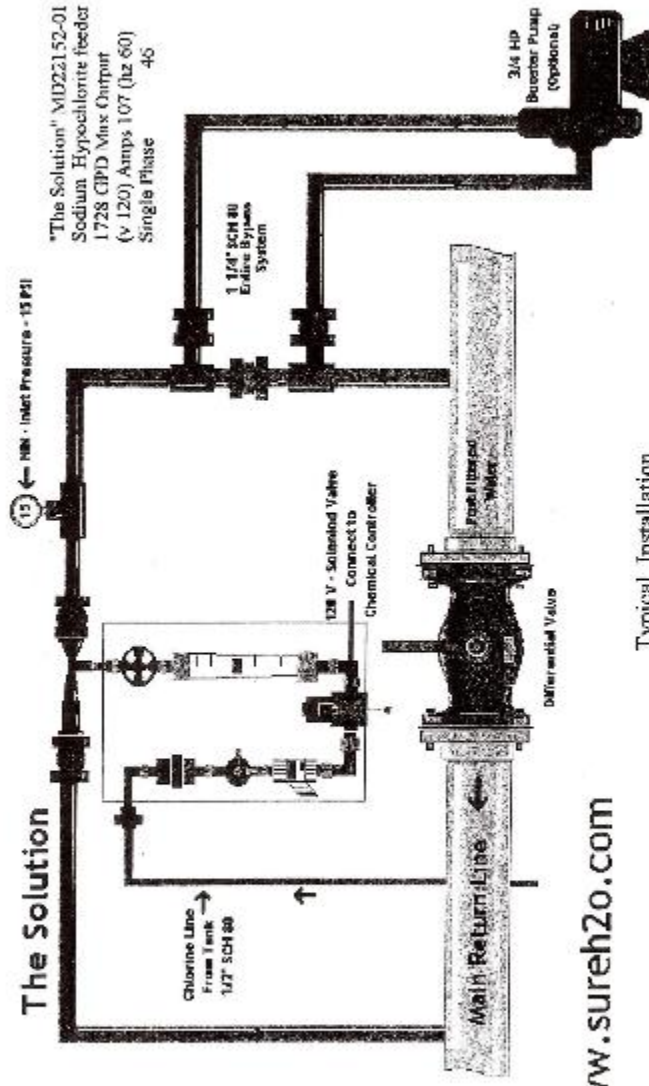
1. Read entire product manual
2. Bypass stream must be capable of delivering approximately 39.6 gpm
3. Minimum venturi inlet pressure is 15 psi (20-25 psi recommended)
4. Inlet side of venturi is to be fed by post filtered water
5. Pressure and flow requirements are to be met by creating back pressure on upstream side of main return valve by throttling down the main return line valve. **Note:** If required recirculation rate cannot be maintained after throttling down main return line valve, it is recommended a booster pump be installed in the by-pass stream, upstream of the inlet side of the venturi prior to the pressure gauge. **See Typical Installation Drawing**

2. Installation Requirements

1. Top of unit should be mounted at approximately eye level.
2. Unit must be installed in exact vertical plane to insure accuracy.
3. All piping should be supported and strapped securely to avoid vibration.
4. All Piping and fittings should be SCHED 80 PVC (use of tubing not recommended)
5. Use premium, chemical resistant cement (glue) on all PVC connections (Weld-on 724 CPVC Industrial Grade Cement and Weld-on C-65 Cleaner-is recommended)
6. It is highly recommended that Pipe Cutters rather than hacksaws be used on all PVC cuts.
7. Teflon tape and Teflon pipe dope are to be used on venturi threads, when mounting Isolation valves.
8. Unit is to be electrically connected to electronic chemical controller (supplied by others)

Important: When using hacksaw or drilling PVC pipe it is extremely important that ALL Shaving or filings be removed and cleaned from PVC pipe prior to glueing. Any debris left in pipes may cause clogging of venturi , resulting in unit failure.

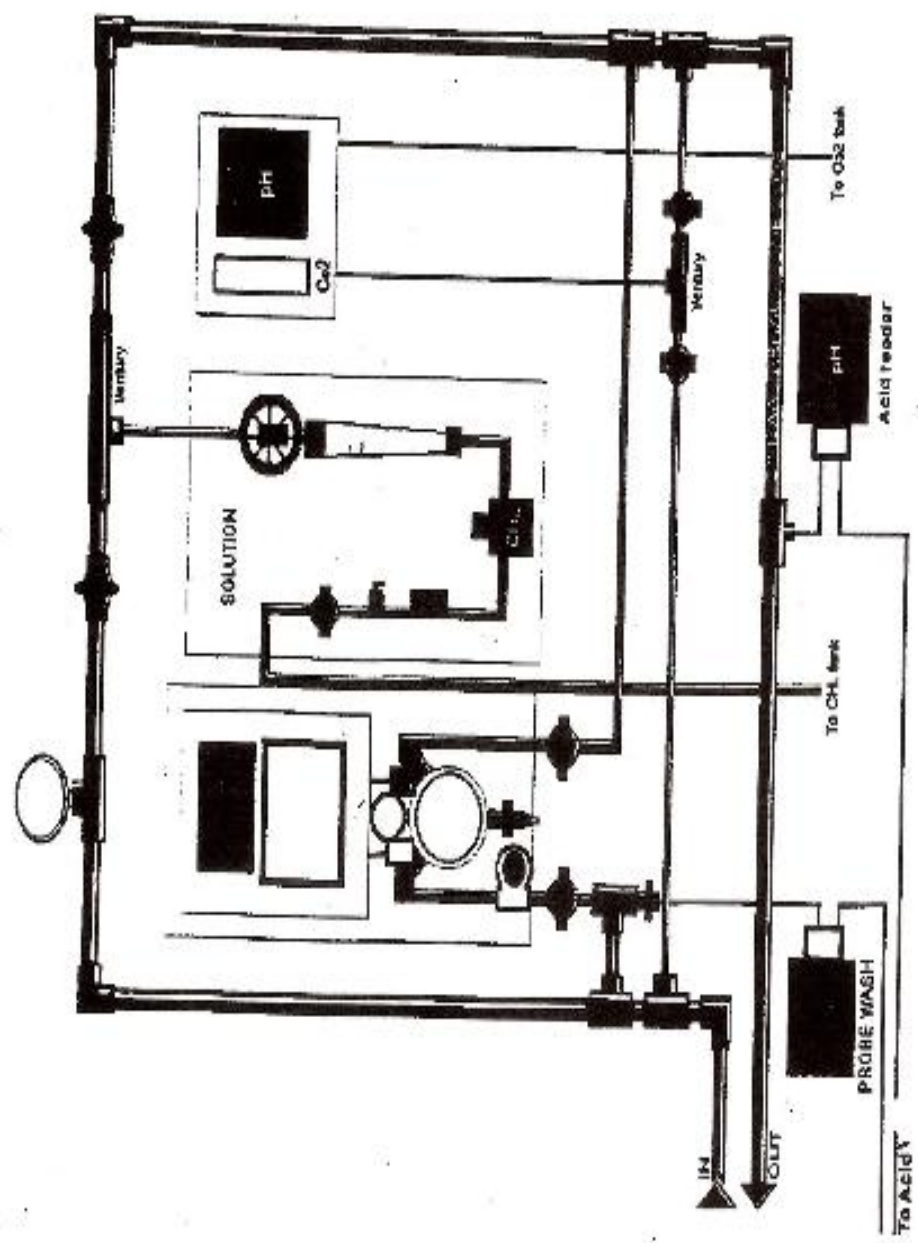
SureWater Technologies Inc.



www.sureh2o.com

Typical Installation

"The Solution" MD221 52-01
Sodium Hypochlorite Feeder
1728 GPD Max Output
(~ 120) Amps 107 (Hz 60)
Single Phase 46



3. Installation Instructions

a. Mounting Unit

Unit comes with mounting hardware (four screws and anchors) to be used with the four existing (pre-drilled) mounting holes located in the channel bracket on the back of the unit.

Place unit on desired location (wall – recommend indoors) use level to insure vertical plane of flow meter and mark holes. Drill $\frac{1}{4}$ " anchor holes and insert anchors ,use provided screws to mount unit to wall. **Note:** ($\frac{1}{4}$ " Drill bit is provided with some units)

b. Schematic / Unit Drawing

Drawing is of "The Solution MD 22152-01"/ not of this unit

The CN03 Model is the same except for

1. The Solenoid valve is replaced with and Electric Actuated Ball Valve
2. The Electric is 220v / 50hz /see actuator data sheet
3. The Venturi Isolation Valves and the Pressure Gauge Tee are 1 $\frac{1}{2}$ "

c. Installation Drawings

Drawings are of "The Solution MD 22152-01"/ not of this unit

The CN03 Model is installed basically the same.

Pipe sizes will vary according to individual installation, depending on length of runs, turns, rises and drops, ect. Generally the by-pass for the CN03 is a 2" loop bushed down to 1 $\frac{1}{2}$ " Prior to the unit. **See:** Dual Installation

1. Typical Installation
2. Dual Unit Installation
3. Integrated Installation

(This shows the existing differential in by-pass loop being used for more components, typically the controller (probe cell), the co2 feeder Venturi, the Solution feeder Venturi and the Solution X-2 PH feeder Venturi See More Possibilities at WWW.Sureh2o.com

d. Plumbing

The unit is to be plumbed on a 2" by-pass stream, reduced to 1 ½" prior to Inlet side of 0-60psi pressure gauge 1 ½" tee (supplied, pre-mounted). Inlet side of venturi is to be fed by post filtered water prior to (upstream of) main return valve. Outlet side of Venturi isolation valve should continue in 1 ½" until first fitting then resume 2" through injection in main return. **See: Dual Installation Drawing**

Note: Booster pump may be required, consult Engineer. (Design plans)

Unit comes 99% pre-assembled on white PVC board, which is mounted on PVC channel.

One ½" Asahi Union Diaphragm Valve with o-rings (supplied, red handle) is to be installed on board at metering valve location (between flow meter and Venturi).

Caution: Do not put unnecessary stress on Clear PVC Pipe.

Two 1 ½" Union Ball Valves with reducers (supplied, isolation valves) are to be Installed (threaded connections) directly onto the inlet and outlet sides of the Venturi. **Note:** Use Teflon tape and Teflon pipe dope.

Install vertically, pre-mounted 0-60 psi liquid filled pressure gauge (supplied on 1 ½" tee) in by-pass stream approximately 10" upstream of 1 ½" isolation valve prior to Venturi.

Unit comes with two four inch PVC channels (pre-drilled), with two Aickinstrut 1 ½" PVC pipe fasteners.

These are to be installed 5" prior to Venturi inlet isolation valve and 5" post Venturi outlet isolation valve. (screws and anchors are supplied)

Chlorine supply line should be hard piped entirely from chemical supply tank using ½" schedule 80 PVC. **Note:** Multiple units may require larger pipe sizing. Tubing is not recommended.

18" PVC poly tubing (supplied) is to be installed on barbed end of lab cock Clean out valve.

e. Electrical

Component: Plast-o Matic

Model EABV1-2-050-VS-PV Electric Ball Valve Actuator

See: Product Data Sheet

Electrical Connection should be done by an electrician or qualified technician

After mounting, unit is ready for electrical connection.

Electric Ball Valve Actuator is to be electrically connected to Chemical Controller.

The 3 wire System, Function: Fail Safe Version / normally closed, is recommended.

Refer: to: Plast-o-Matic Installation, Operation & Maintenance Instructions



Multi-Voltage Actuator with Fail-Safe and 4-20mA Digital Positioner Options



Standard Features

- Multi-voltage with auto-voltage sensing
 - 12-24V AC or DC
 - 85-240V AC or DC
- LED status light to indicate operational status of actuator
- Electronic over-torque protection against valve jam
- Thermostatic anti-condensation heater
- Manual override for emergency hand operation
- Remote position indicator
- IP65 NEMA-4 weatherproof anti-corrosive and UV protected polyamide housing
- Local visual position indicator
- Easy mounting with double-D drive
- All external electrical connections via DIN plugs
- CE marked
- ISO 9000 manufacturer
- Fail-safe and 4-20mA digital positioner options

The EBVA features a rugged weatherproof and anti-corrosive polyamide housing and more features than the original EBV. A visual indicator shows whether the actuator is operating correctly, or had tripped out either by its electronic torque limiter, or has been left in 'manual' mode. Site operators are no longer left with the 'valve or actuator' question when an actuator does not respond to a signal.

The EBVA is quick and easy to install, with a double-D drive, allowing fast mounting to True-Blue valves. There is no need to remove the cover to connect the EBVA electrically, saving installation time. Using the external DIN plugs and external wiring diagrams supplied with the actuator, installation can be pre-wired.

Protection against valve jams is provided by an electronic torque limiter, which auto-relaxes the gearbox when activated, allowing the manual override to be selected to assist in clearing the jam. The effect of condensation is eliminated by an internal thermostatic anti-condensation heater that does not require a separate independent power supply.

Standard function for the EBVA is power open, power close, stays put on power failure.

New to the EBVA are factory installed fail-safe and modulating options. The modulating digital positioner offers auto-calibrating and self-resetting functions.



PLAST-O-MATIC VALVES, INC.

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(973) 256-3000 • Fax (973) 256-4745 • www.plastomatic.com

SPECIFICATIONS				
Sizes	3/8" - 2" Valves		2" Full Port through 4"	
Actuator	EBVA2, TEVA6	EBVA1, TEVA5	EBVA4	EBVA3
Voltage AC (1ph) or DC)	12 - 24	85 - 240	12 - 24	85 - 240
Working Time - Sec. 0-90° (No Load) ±10%	11	11	17	17
Maximum Run Torque Nm	20	20	55	55
Maximum Break Torque Nm	25	25	60	60
Duty Rating %	75	75	75	75
IP Rating - IEC 60529	IP65	IP65	IP65	IP65
Working Angle Standard	90	90	90	90
Temperature Range (C)	-20° to +70°	-20° to +70°	-20° to +70°	-20° to +70°
Motor Switch	2 x V3	2 x V3	2 x V3	2 x V3
Volt Free End of Travel Confirmation	2 x V3	2 x V3	2 x V3	2 x V3
Anti-Condensation Heater (W)	4	4	4	4
Current Full Load	12VDC 24VDC 24V/1ph 110V/1ph 240V/1ph	1.03A 0.48A 0.98A 0.19A 0.12A	1.96A 0.77A 1.75A	0.31A 0.19A
Weight (kg)	1.5	1.5	2.0	2.0
ISO:5211	F03,F04 and F05	F03,F04 and F05	F05 and F07	F05 and F07
Drive	Double-D	Double-D	Double-D	Double-D

EBVA STATUS LIGHT FUNCTIONS



CONSTANTLY LIT LED

If the actuator is operating correctly, with no faults, the LED shows a constantly lit light.



THE LED FLASHES WITH 2 BLINKS

If the actuator has been left in 'manual' mode, the actuators motor runs but doesn't drive the output shaft. After a pre-set time, the actuator knows that as the torque limiter has not activated, and that the motor is running, it must be in manual mode.



THE LED FLASHES ON/OFF

When the actuator senses impending valve jam, the electronic torque limiter is activated and on activation, repeatedly flashes the LED on and off



MODULATING ACTUATOR (Option 3 and 4)

Provided via factory installed, self-calibrating digital positioner with 4-20 or 0-10V.

EBVA OPTIONAL FEATURES

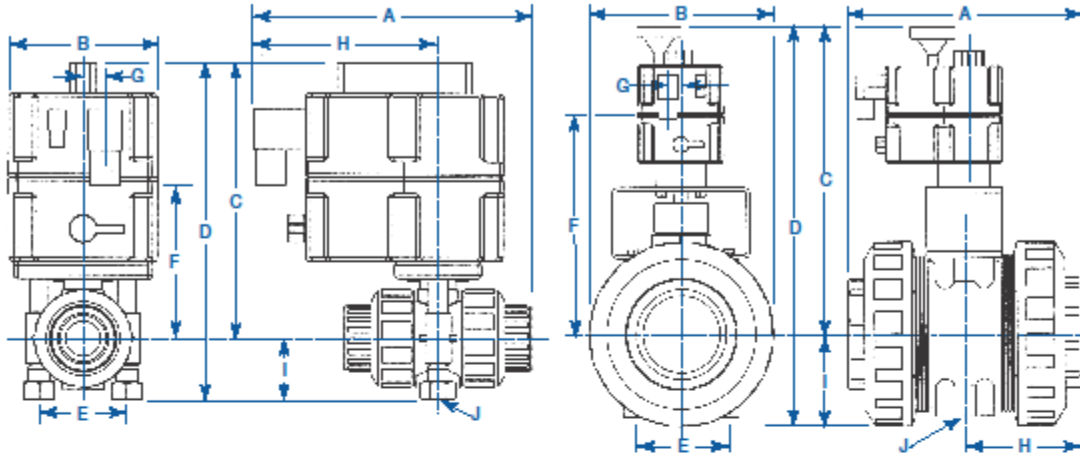
FAIL SAFE ACTUATOR (Option 2, 4, or 6)

Fail safe achieved with the use of industrial re-chargeable batteries which are supplied with the actuator. Specify fail closed or fail open.

APPROXIMATE FLOW RATES AT 1.0 PSI (0,07 Bar) PRESSURE DROP											
Valve Sizes	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	201	2 1/2"	3"	4"
C _v Factor		10	20	40	80	100	120	150	340	485	768

3/8" - 2" SIZES

2" FULL PORT - 4" SIZES



VALVE & ACTUATOR ASSEMBLY - MODEL NUMBERS & DIMENSIONS

Pipe Size	Actuator* with Valve Model No.	A		B		C		D		E		F		G		H		I		J
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN
3/8"	EBVA-037 -	7 ³ / ₁₆	183	4 ¹¹ / ₃₂	110	7 ³ / ₃₂	180	8 ¹⁹ / ₃₂	219	1 ³ / ₄	45	3 ⁵ / ₈	94	5 ¹ / ₈	16	3 ⁷ / ₈	100	1 ¹ / ₂	38	1/4 - 20
1/2"	EBVA-050 -	7 ³ / ₁₆	183	4 ¹¹ / ₃₂	110	7 ³ / ₃₂	180	8 ¹⁹ / ₃₂	219	1 ³ / ₄	45	3 ⁵ / ₈	94	5 ¹ / ₈	16	3 ⁷ / ₈	100	1 ¹ / ₂	38	1/4 - 20
3/4"	EBVA-075 -	7 ³ / ₁₆	183	4 ¹¹ / ₃₂	110	7 ¹⁷ / ₃₂	188	9 ¹ / ₃₂	229	2 ¹ / ₄	57	4 ¹ / ₈	105	5 ¹ / ₈	16	3 ⁷ / ₈	100	1 ¹ / ₂	38	1/4 - 20
1"	EBVA-100 -	7 ³ / ₁₆	183	4 ¹¹ / ₃₂	110	7 ²⁹ / ₃₂	198	9 ¹⁷ / ₃₂	242	2 ¹ / ₂	64	4 ³ / ₈	111	5 ¹ / ₈	16	3 ⁷ / ₈	100	1 ³ / ₄	45	1/4 - 20
1 1/4"	EBVA-125 -	7 ³ / ₁₆	186	4 ¹¹ / ₃₂	111	8 ¹ / ₄	210	10 ⁹ / ₁₆	269	3 ¹¹ / ₃₂	85	4 ⁷ / ₈	124	5 ¹ / ₈	16	3 ⁷ / ₈	100	2 ⁵ / ₁₆	59	1/4 - 20
1 1/2"	EBVA-150 -	7 ³ / ₁₆	186	4 ¹¹ / ₃₂	111	8 ¹ / ₄	210	10 ⁹ / ₁₆	269	3 ¹¹ / ₃₂	85	4 ⁷ / ₈	124	5 ¹ / ₈	16	3 ⁷ / ₈	100	2 ⁵ / ₁₆	59	1/4 - 20
2"	EBVA-200 -	7 ³ / ₁₆	186	4 ¹¹ / ₃₂	111	8 ¹ / ₄	210	10 ⁹ / ₁₆	269	3 ¹¹ / ₃₂	85	4 ⁷ / ₈	124	5 ¹ / ₈	16	3 ⁷ / ₈	100	2 ⁵ / ₁₆	59	1/4 - 20
2" FP	EBVA-201 -	9 ³ / ₈	206	5 ⁵ / ₁₆	135	9 ¹⁷ / ₃₂	242	11 ²⁹ / ₃₂	303	2 ⁵ / ₈	66	7 ²⁹ / ₃₂	196	5 ¹ / ₈	16	5 ⁵ / ₁₆	135	2 ⁵ / ₈	60	3/8 - 16
2 1/2"	EBVA-250 -	9 ³ / ₈	247	5 ²⁹ / ₃₂	149	9 ⁷ / ₁₆	239	14 ¹¹ / ₃₂	364	3 ³ / ₈	78	9 ⁷ / ₁₆	239	5 ¹ / ₈	16	4 ¹¹ / ₃₂	110	3 ³ / ₈	78	8MM
3"	EBVA-300 -	10 ¹⁷ / ₃₂	268	7 ³ / ₁₆	183	14 ³ / ₈	365	18 ⁹ / ₃₂	461	2 ¹³ / ₁₆	72	11 ⁷ / ₁₆	290	1 ⁹ / ₃₂	15	5 ⁵ / ₁₆	135	3 ²⁹ / ₃₂	96	5/8 - 18
4"	EBVA-400 -	11 ⁹ / ₁₆	293	9 ³ / ₁₆	234	15 ³ / ₁₆	386	19 ⁷ / ₈	502	4 ³ / ₄	121	10 ⁵ / ₈	271	5 ¹ / ₈	16	5 ³ / ₄	145	4 ⁵ / ₈	117	8MM

* To complete the Model Numbers refer to the ordering chart below. Voltage must be specified with model number.

ORDERING INFORMATION

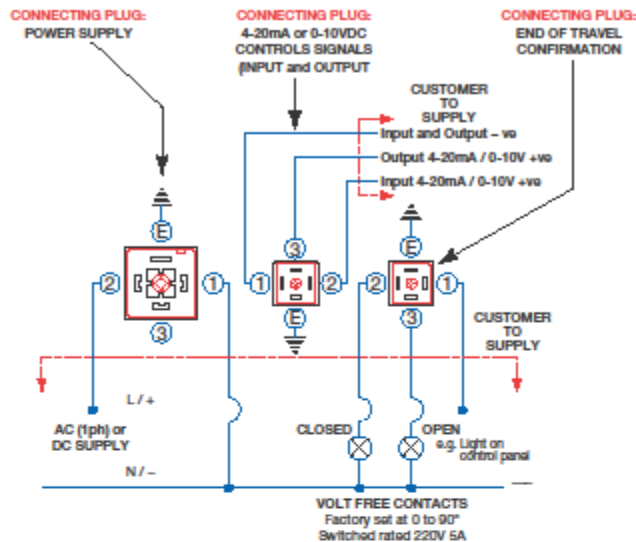
Order by part number and specify exact chemicals, temperatures and pressures. To arrive at the proper art number, please consult diagram below.

The letters and numbers used in this part number are for example only!

EBVA	1	1	050	X	V	T	PV	A
BASIC MODEL VALVE	VALVE TYPE SIZE/VOLTAGE	OPTIONS	VALVE SIZE		SEAL MATERIAL		BODY MATERIAL	BALL OPTIONS
EBVA 2-Way	1 - 2-Way, 1/4"-2", 85-240 Volts, A/C or D/C	1 - Standard Actuator	037 - 3/8"		V FKM		-PV PVC	-
	2 - 2-Way, 3/8"-2", 12-24 Volts, A/C or D/C	2 - Actuator, Fail Safe	050 - 1/2"		EP EPDM		-CP CPVC	-
	3 - 2-Way, 2 1/2"-4", 85-240 Volts, A/C or D/C	3 - Actuator, 4-20 µA	100 - 1"				-PP Natural Polypro	A - 3 Hole Ball
	4 - 2-Way, 2 1/2"-4", 12-24 Volts, A/C or D/C	4 - Actuator, 4-20 µA, Fail Safe	125 - 1 1/4"				-FF PVDF	C - Characterized Descending Curve
		5 - Actuator, 0-10 VDC	150 - 1 1/2"					D - Characterized Ascending Curve
		6 - Actuator, 0-10 VDC, Fail Safe	200 - 2"					E - Vented Ball
TEBVA 3-Way	5 - 3-Way, 1/4"-2", 85-240 Volts, A/C or D/C		201 - 2" Full Port					
	6 - 3-Way, 3/8"-2", 12-24 Volts, A/C or D/C		250 - 2 1/2"					
			300 - 3"					
			400 - 4"					
			20 - 20mm					
			25 - 25mm					
			32 - 32mm					
			40 - 40mm					
			50 - 50mm					
			63 - 63mm					
			90 - 90mm					
			110 - 110mm					

SPECIAL DESIGNATION -
When "X" appears in this spot it designates BSP threads

AC (1ph) or DC SUPPLY – WIRING FOR MODULATING ACTUATORS

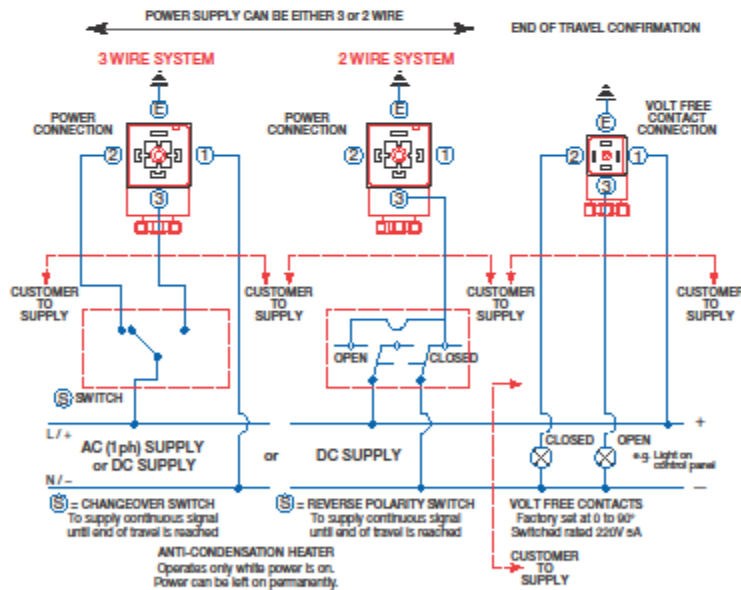


Function: MODULATING VERSION

- Power open, power close – Actuator movement controlled by input signal (4-20mA or 0-10VDC)
- Standard Operation:
4mA or 0V = Actuator Closed, 20mA or 10V = Actuator Open (can be reversed)
- Standard Operation:
Actuator close on loss of control signal, stays put if loss on main power.
- Output signal provided as standard (in same format as supply signal)

NOTE: Wiring showing same supply as motor is only a suggestion, Read "Installation, Operation and Maintenance Instructions" before connecting.

AC (1ph) or DC SUPPLY – WIRING ON/OFF OR FAIL SAFE ACTUATORS



Function: ON/OFF VERSION

- Power open, power close
- Stays on in power failure

Function: FAIL SAFE VERSION

- Power open, power close – Trickle charges battery in either open or closed position
- Actuator sent by battery power to preset fail safe position on power failure
- Actuator returns to pre-failure position on power resumption
- Fail safe can be either NC (normally-closed) or NO (normally-open)

NOTE: Wiring showing same supply as motor is only a suggestion, Read "Installation, Operation and Maintenance Instructions" before connecting.

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PLAST-O-MATIC[®] VALVES, INC.

SERIES EBVA & TEBVA MULTI-VOLTAGE ELECTRIC ACTUATORS

Installation, Operation & Maintenance Instructions

Damage caused by non-compliance to these instructions will not be covered by our warranty. Read these instructions **BEFORE** installing or connecting the actuator.

SAFETY INSTRUCTIONS. Electric actuators operate with the use of electricity. It is recommended that only qualified electricians or people instructed in accordance with electrical engineering and familiar with local health and safety standards be involved in the connection of these actuators. It is strongly recommended that each actuator has its own independent fused system to protect it against the influence of other electrical devices connected to the system.

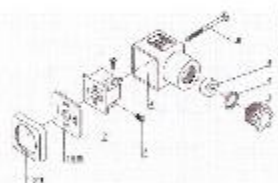
ELECTRICAL CONNECTORS (DIN Plug)



Warning! **BEFORE** connecting, ensure the voltage to be applied is within the range shown on the ID label. Do NOT connect a voltage in excess of 24V to the EBVA-2, EBVA-4 or TEBVA-5 Series actuators or irreparable damage will be caused and will NOT be covered by our warranty.

EBVAs are multi-voltage capable with automatic voltage sensing. All connections are made using the supplied external DIN plug. The addition of a factory seal to ensure minimal air ingress means there is no need to remove the cover to connect electrically – in fact, removing the cover may invalidate the warranty.

The EBVA has 2 voltage ranges: EBVA-1, EBVA-3 and TEBVA-5 Series: Accepts voltages from 80-240V AC(1ph) and DC
EBVA-2, EBVA-4 and TEBVA-6 Series: Accepts voltages from 12-24V AC (1ph) or DC



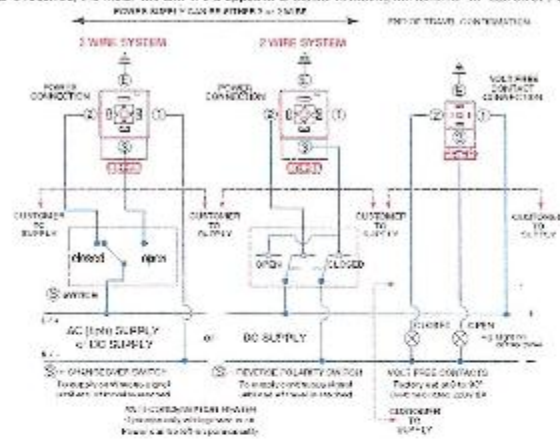
1. Grommet – Use size G11
2. Terminal strip
3. Cable securing screws
4. Housing
5. Grommet
6. Washer
7. Flange nut
8. Securing Screw

CABLE SIZE	SMALL CONNECTOR		LARGE CONNECTOR	
	DIN 43880, ISO 4400 & C150		DIN 43880, ISO 4400 & C150	
	Minimum Diameter	Maximum Diameter	Minimum Diameter	Maximum Diameter
EBVA	5 mm	5 mm	8 mm	10.5 mm

WARNING — Watertightness: Ensure that the rubber gasket (part 7 shown) is correctly installed when securing a DIN plug to the actuator. Failure to do so could allow water ingress – damage caused by this installation error will invalidate any warranty. Do not over-tighten the securing screw (part 8) when assembling.

WIRING DIAGRAMS FOR ON/OFF VERSION

On receipt of a particular power signal, the motor drive will use a planetary gearbox system, rotates the output shaft. The motor is stopped by internal cam, tied to the output shaft, striking micro switches which cuts power to the motor. When a continuous signal is received, the motor will turn in the opposite direction, reversing the direction of rotation of the output shaft.



EMERGENCY MANUAL OVERRIDE: All EBVA electric actuators are provided with a detachable manual override to allow manual operation should power not be available. There are 2 marked, selectable positions:

MAN for manual operation and **AUTO** for automatic operation.

- Do NOT attempt to operate the manual override operator without first selecting **MAN** using the internal selector lever otherwise irreparable damage will be caused to the actuator gearbox. Damage so caused is NOT covered by our warranty.
- Do NOT remove the manual override selector lever retaining screw as this will allow the internal parts to become loose and will cause irreparable damage to the actuator gearbox. Damage so caused is NOT covered by our warranty.

Operating procedure for manual override:



If the actuator is rotated beyond the open and closed limits taking it outside the working quadrant **O** and left outside the working quadrant when returned to **AUTO**, malfunction may occur - see following pages for detailed information.



Operating the manual override will cause the LED status light to flash - see following pages for details.

Selecting emergency manual operation: Using the manual override selector lever, select **MAN**. Do not force the lever as the actuator will be damaged; this is not covered by our warranty. There are different situations from which **MAN** can be selected that each receive different responses from the EBVA actuator which are outlined on the next page...

II Set up and Operation

1. Set Up

The CN03 High Capacity Vacuum Induction Chemical Feed System is designed to feed Sodium Hypochlorite solution.

Unit is to be used with Electronic Chemical Controller (IE: Strantrol System 5).

Chemical Controller operates unit- turns unit on and off.

Controller must be capable of intermittent feed(proportional),programmable as to cycle time, proportional span and fail safe lockout.

Controller should be set to intermittent feed.

Warning: Fail Safe (or lockout timer) should be set so as not to allow feed rate to exceed acceptable chlorine levels in pool water.

Example:

100,000 gallon pool

1 gallon Cl₂ (10% sodium hypochlorite) = 1ppm / 100,000 gallons

5ppm Cl₂ = highest acceptable level

.5 gpm feed rate (set at flow meter)

5 ppm = $\frac{5 \text{ gallons Cl}_2}{.5 \text{ gpm feed rate}}$ = 10 minute fail safe

Unit feed rate adjustable: 0 – 3.3 gpm / 12 Lpm Flow meter is calibrated in both gpm/Lpm, Maximum output 4,572 gpd

2. Operation

After Chemical Controller has been set up and fail safe lockout time has been programmed and recirculation system is in operation:

- a. Open 1 ½" Venturi by-pass isolation valves (located on inlet and outlet side of Venturi)
- b. Turn on booster pump note: booster pump should be electrically interlocked to recirculation pump / recommend booster pump run continuously (when recirc is on). Inlet pressure should be 20-30 psi, adjust at booster pump
- c. Open blue handle chlorine shut off valve (red handle labcock valve should be closed)
- d. Put chemical controller in feed mode
- e. With red handle Metering Valve adjust float in Flow meter to desired feed rate (just above mid-range is recommended)
- f. Reset Chemical Controller to auto

Feeder is now operated by Chemical Controller (powered on and off)

3. Service / Maintenance

This feed system is nearly maintenance free however it does require cleaning periodically. Cleaning is recommended once a month.

Cleaning instructions are located on Unit. Left side for cleaning Acid Feeder, right side for cleaning Chlorine Feeder.

Warning Chemical Hazard: Always Wear Appropriate Personal Protective Equipment

- 1. When Cleaning Unit / or Handling Chemicals**
- 2. Never Allow Acid to Mix with Chlorine / or mix different Chlorines**

To Clean Unit

- 1.** Set controller to feed mode
- 2.** Close Chlorine Shut off Valve
- 3.** Insert clean-out labcock flex tube in gallon of water and open labcock valve, allow gallon of water to flow through feeder rinsing it free of chlorine solution.
- 4.** Insert clean-out labcock flex tube in gallon of muriatic acid (20% baume) and allow acid to flow through unit approximately 10 seconds
- 5.** With clean out labcock valve still open, re-insert labcock flex tube in fresh gallon of water, allow entire gallon of water to flow through unit rinsing it free of acid.
- 6.** Clean Y-Strainer if necessary (hand tight only)
- 7.** Close clean out labcock valve
- 8.** Re-open chlorine shut off valve
- 9.** Reset Chemical Controller to auto
- 10.** Remove and clean foot valve / strainer as needed

4. Caution Statement

- a. It is recommended you close the chlorine shut off valve if there is a loss of chemical supply failure to do so may result in damage to the float in the flow meter.
 - b. Power surge may cause damage the din connector or the Electric Actuator use of Surge protection is highly recommended.
-

Technical Specifications Data

“The Solution” Model CN03 High Capacity Vacuum Induction Chemical Feed System
(Sodium Hypochlorite Solutions)

1. Adjustable Feed Rate 0-4572gpd (unit calibrated in gpd/ LPM)
2. Electrical – Multi voltage with auto-voltage sensing 85-240v ac or dc
3. Overall dimensions 15” w x 27” L

Component / Materials

1. Harvel Clear PVC pipe Sched 40, ½”
2. Spear Labcock valve ¼” Sched 80 PVC Viton
3. Blue White F-460 Flow meter ½” viton .3-3.3gpm Teflon
4. True blue Union Valve 1/2” Sched 80 PVC Viton
5. Asahi-Diaphragm Valve 1/2” Sched 80 viton/ptfl
6. Clear Flex 70 PVC Tubing Cat No. 8170-4430
7. Hayward Clear PVC y-strainer ½” Viton
8. Plast-o-Matic ½” True Blue Union Ball Valve with Electric Actuator
Model No. EBVA1-2-050-vs-pv
9. Mazzei Venturi MD No. 1587 Kynar NSF Cert St. 50

Mounting Hardware / Materials

1. Stainless Steel Screw & Lock Nuts
2. 1’x2’x3/8” White PVC Board
3. Aickinstrut PVC Channel 15” L
4. Aickinstrut Fiberfast Clamps, Nuts & Bolts
5. Aickinstrut #32 PVC Click

Warranty Statement

High Capacity Vacuum Induction Chemical Feed System MD-CN03

SureWater Technologies, Inc. (Hereafter SWT) warrants equipment of it's manufacture and bearing it's identification to be free of defects in workmanship and material. SWT's liability under the warranty extends for a period of one year from date of delivery from our factory or authorized distributor. It is limited to repairing or replacing any device or part which is returned, transportation prepaid to the factory within one year of delivery to the original purchaser, and which is prove defective upon examination.

SWT disclaims all liability for damage during transportation, for consequential damage of whatever nature for damage due to handling, installation or improper operation, and for determining suitability for the use intended by the purchaser.

SWT makes no warranties either expressed or implied other than those stated above. No representative has the authority to change or modify this warranty in any respect.