

# **FCD WCABR1007-00**

(Part PB-36T)

# Auto-Mizer™ Series 36T

A solid-state timing device with the Series 36 Electric Actuator, used for draining, sampling, purging, flushing and other applications.

**The Worcester Auto-Mizer (Series 36T)** is a unique combination of a quarterturn ball valve, an electric actuator and a solid state timing device which provides a self-contained answer to the problems associated with manually

draining, sampling, purging and flushing piping systems and equipment. Designed with manpower reduction and energy conservation in mind, the Auto-Mizer will automatically open and close a valve for various time periods that are field-selectable, by simply positioning switches on the timer circuit board.

The Auto-Mizer is offered as standard mounted to one of our  $\frac{1}{4}$ " -2" three-piece Miser® ball valves because of their versatility of end

connections and materials. Other valve styles can also be adapted. Operating on 120 VAC, only two wires are needed to connect the Auto-Mizer, facilitating easy installation and making it usable anywhere electricity is available.

### **APPLICATION**

The Auto-Mizer is ideal for draining condensate from steam lines, water from compressor drain legs and as a sampling valve for everything from crude oil to beverages. Because of its compact design, low weight and cost, it is ideal for OEM applications.

- · Air Drying Equipment
- Sampling Systems
- · Compressor Installations
- Tank Draining
- Condensate Draining

### **SPECIFICATIONS FOR THREE-PIECE MISER A44**

Valve Data	
Valve Sizes	. ¼", ¾", ½", ¾", 1", 1¼",
	1½", 2"
Ends	. Screwed, Solder/Sweat, Socket
	Weld and Quick Disconnect
Body Material	. Brass, Carbon Steel,
•	Stainless Steel
Ball and Stem	. Brass, Stainless Steel
Seats/Seals	. Fluoropolymer, Polyfill®/
	Fluoropolymer, TFE Coated
	"S" Gasket

Additional materials and styles available—consult Flowserve.

Actuator	Data
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Actuator Body	NEMA 4 Watertight Enclosure
	Epoxy-coated Aluminum
Supply Voltage	120 Volts AC (nominal)
Operation	Unidirectional, Counter-
	Clockwise at Valve Stem
Temperature Limits	0°F to 150°F Maximum

Ball Valve Size	Actuator Size	Torque (in-lb)	Current (Locked Rotor Amps) 120 VAC	Duty Cycle @70°F Ambient
½" – 1"	1036	150	1.7	20%
1½" – 2"	2036	550	2.9	20%

### **FEATURES AND BENEFITS**

Simple Two-Wire Connection – to integral terminal strip.
Allows installation anywhere 120 VAC is available.

# NEMA 4 Watertight Enclosure –

prevents ingress of dirt and moisture.

**Manual Reset Button** – allows reset of timer in the event of power loss, facilitates testing.



**Solid-State Timer** – provides reliable operation and low power consumption. Eliminates troublesome cams and mechanical switches.

**Programmable Microswitches** – facilitates variation of open and close times. Open: 6 sec. to 90 sec. Close: 15 min. to 3 hr. 45 min.



# Worcester Actuation Systems

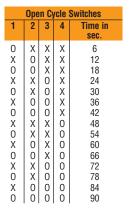
### **Dimensions - inches**

Valve Size	Α	В	C	(lb.)
1/4" - 1/2"	2.54	1.75	8.82	7.2
3/4"	2.76	2.00	8.91	7.7
1"	3.66	2.38	9.15	9.0
11/4"	4.16	2.70	9.34	11.0
1½"	4.50	3.16	10.11	13.0
2"	4.94	3.56	10.30	15.0

### **Actuator Technical Data**

### Timing Sequence\*

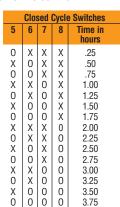
Located on the circuit board is a switch package which controls the open/closed times. The first four switches, #1 through #4, control the open time, the second four, #5 through #8, control the closed time. The following chart lists the time sequences possible and how to set them.

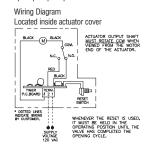


"O" switch is ON, "X" switch is OFF

Any open cycle setting may be used with any closed cycle setting.

\*Custom made timers available on application.





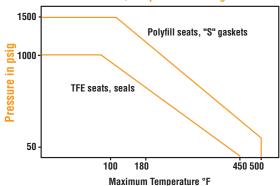
# VALVE SIZES 1/4"—1" SHOWN 5.88 7.88 1.18 1/2"—14 N.P.T. COVER REMOVAL ALLOWANCE 3.75 NICHES MAX.

### **VALVE TECHNICAL DATA**

### **Cv DATA**

Valve Size	1/4" — 1/2"	3/4"	1"	11//"	1½"	2"
Cv (USGPM)	8	12	32	46	82	120

### **Pressure/Temperature Ratings**



For Steam Service consult Energy Mizer brochure.

# HOW TO ORDER

1"	<u>A44</u>	<u>6</u> 	<u>6</u>	Ī	<u>SE</u>	1036TW 120A	*
Valve Size	Valve (Mounted)	Body, Pipe Ends	Ball, Stem	Seats, Seals	Ends	Actuator, Timer	Variations V-Numbers
1¼" %" ½" 3¼" 1" 1½" 2"	<b>A44</b> - 3-piece	1 - Brass 4 - Carbon Steel 6 - 316 S.S.	1 - Brass 6 - 316 S.S.	T - TFE PM - Polyfill seats, TFE Coated "S" gaskets	SE - Screwed SW - Socket Weld (not available in brass) TC - Quick Disconnect TE - Solder/Sweat (Brass only)	1036 TW 120 A for valve sizes \( \lambda'' - 1'' \) 2036 TW 120A for valve sizes 1\( \lambda'' - 2'' \)	Blank if no variations

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Ordering example: A 1\* three-piece Miser Ball Valve with 316 S.S. body, screwed pipe ends, ball and stem, TFE seats and seals with a mounted Series 36T.

The Series 36T can be ordered without a valve by specifying only: 1036 TW 120A or 2036 TW 120A.

Due to the continuous development of our product range, we reserve the right to alter the information contained in this brochure as required.

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can (and often does) provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation Operation Maintenance (IOM) instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

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For more information about Flowserve Corporation, visit www.flowserve.com or call USA 1 800 225 6989.

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