

Rainwater Harvesting - Accessories

Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

RWA-ABVP

Actuated Ball Valve – Spring Return Position Switches

Actuated ball valves are designed to control water flow in commercial rainwater harvesting systems. This valve is most often used to control a secondary water supply to bypass the rainwater harvesting system during periods of no rainwater availability or system maintenance. In the event of power failure the valve returns to an open or closed state using a spring-return feature and configuration. Actuator includes position switches to monitor valve positions of 10° and 10° to 90°.

Features

- Spring return valve actuator
- Visual valve position indicator
- Two dry contacts for valve position monitoring
- Manual override control with hex key (supplied)
- Maintenance free
- Manufactured by Belimo®



RWA-ABVP

Technical Data			
Actuator		Valve:	
Power Supply	24 VAC +/- 20%, 50/60 Hz, 24 VDC +/- 10%	Service	Water
Power Consumption Running	5W	Flow Characteristic	A-port equal percentage
Power Consumption Holding	2.5W	Sizes	1-1/4, 1-1/2, 2, 2-1/2, 3
Transformer Sizing	7.5 VA	Type of end fitting	NPT female ends
Electrical Connection	3ft, 18 GA appliance cable with 1/2" conduit connector	Materials	
Overload Protection	electronic throughout 0° to 95° rotation	Body	forged brass, nickel plated
Operating Range Y	90°	Ball	stainless steel
Direction of Rotation (Motor)	reversible with CW/CCW mounting	Stem	stainless steel
Direction of Rotation (Fail-Safe)	reversible with CW/CCW mounting	Seats	PTFE
Position Indication	10° and 10° to 90°	Characterization Disc	Tefzel®
Manual Override	5mm hex crank (3/16" Allen), supplied	Packing	2 EPDM O-rings, lubricated
Running Time (Motor)	<math><75</math> seconds	Body Pressure Rating	
Running Time (Fail-Safe)	20 seconds	1-1/4" - 2" (-248)	600 psi
Ambient Temperature Range	-22°F to 122°F	2" (252) - 3"	400 psi
Housing	NEMA 2, IP54, UL enclosure type 2	Maximum differential pressure (ΔP)	50 PSI
Agency Listings†	cULus acc. To UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. To 2004/108/EC and maintenance free	Leakage	0% for A to AB
Servicing		External leakage	according to EN12266-1:2003
Quality Standard	ISO 9001	Cv rating	A-port: see product chart for values
†Rated impulse voltage 800V, Type of action 1.AA, Control Pollution Degree 3		Tefzel® is a registered trademark of DuPont	

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

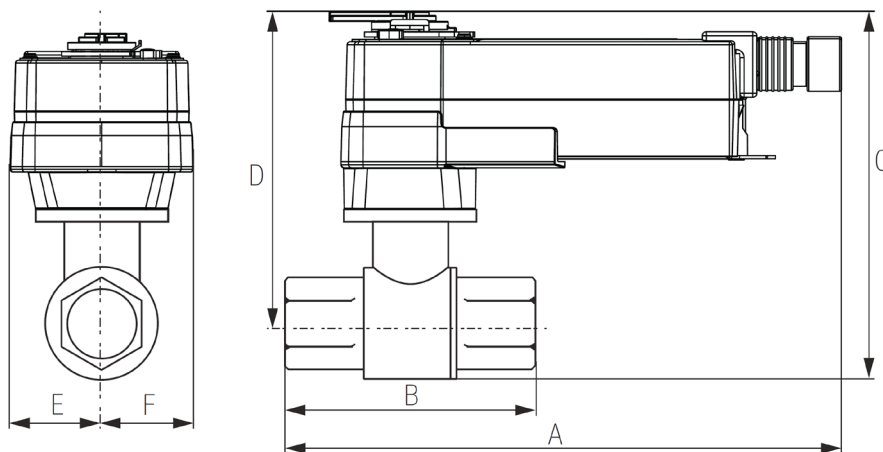
Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

WARNING

Rainwater supplied by Watts rainwater harvesting systems is not potable water and is not intended for potable water applications. Do Not Drink Water supplied from Watts rainwater systems and related equipment. Users shall determine the suitability of the product for the intended application before using.



Dimensions



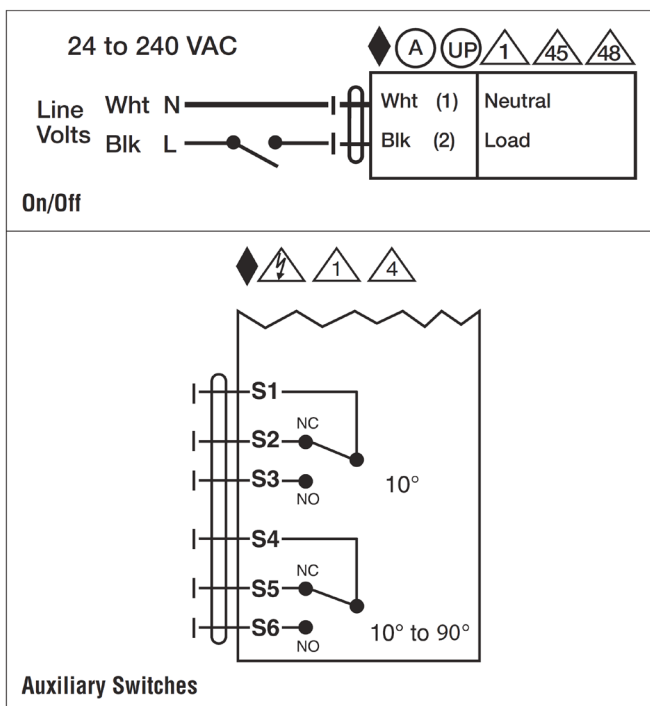
VALVE DIAMETER	A	B	C	D	E	F
1 ¼	10.52	3.72	6.28	5.28	2.02	2.02
1 ½	10.77	3.88	8.96	7.81	2.02	2.02
2	11.27	4.93	10.56	8.86	2.02	2.02
2 ½	11.52	5.55	8.61	6.61	2.02	2.02
3	11.77	5.82	9.11	6.61	2.02	2.02

Wiring Diagram

INSTALLATION NOTES

- Actuators with appliance cables are numbered.
- Provide overload protection and disconnect as required.
- Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.
- Actuators may be powered in parallel. Power consumption must be observed.
- Parallel wiring required for piggy-back applications.
- Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.
- Meets cULus requirements without the need of an electrical ground connection.

WARNING! LIVE ELECTRICAL COMPONENTS!
 During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.



Available Models

MODEL	"VALVE DIAMETER (INCHES)"	CV	PRESSURE RATING	Maximum Differential Pressure
RWA-ABVP-231	1 1/4	25	600 psi	50 psi
RWA-ABVP-232	1 1/4	37*	600 psi	50 psi
RWA-ABVP-238	1 1/2	19	600 psi	50 psi
RWA-ABVP-240	1 1/2	37*	600 psi	50 psi
RWA-ABVP-248	2	29	600 psi	50 psi
RWA-ABVP-252	2	85	400 psi	50 psi
RWA-ABVP-253	2	120	400 psi	50 psi
RWA-ABVP-254	2	240*	400 psi	50 psi
RWA-ABVP-261	2 1/2	60	400 psi	50 psi
RWA-ABVP-264	2 1/2	150	400 psi	50 psi
RWA-ABVP-265	2 1/2	210*	400 psi	50 psi
RWA-ABVP-277	3	70	400 psi	50 psi
RWA-ABVP-278	3	130	400 psi	50 psi
RWA-ABVP-280	3	170*	400 psi	50 psi

* Models without characterization discs

Configuration (add suffix to end of model code)

- FO Fail Open (recommended for direct bypass valve configurations)
- FC Fail Closed (recommended for make-up valve configurations)

