Rainwater Harvesting - Accessories

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

RWA-ABV

Actuated Ball Valve – Spring Return

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.

RWA-ABV

Features

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

Technical Data	
Actuator	
Power Supply	24 VAC +/- 20%, 50/60 Hz, 24 VDC +/- 10%
Power Consumption Running	5W
Power Consumption Holding	2.5W
Transformer Sizing	7.5 VA
Electrical Connection	3ft, 18 GA appliance cable with 1/2" conduit connector
Overload Protection	electronic throughout 0° to 95° rotation
Operating Range Y	90°
Direction of Rotation (Motor)	reversible with CW/CCW mounting
Direction of Rotation (Fail-Safe)	reversible with CW/CCW mounting
Position Indication	<10° and 10° to 90°
Manual Override	5mm hex crank (3/16' Allen), supplied
Running Time (Motor)	<75 seconds
Running Time (Fail-Safe)	20 seconds
Ambient Temperature Range	-22°F to 122°F
Housing	NEMA 2, IP54, UL enclosure type 2
Agency Listings†	cULus acc. To UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. To 2004/108/EC and
Servicing	maintenance free
Quality Standard	ISO 9001
†Rated inpulse voltage 800V, Type of action 1.AA, Control Pollution Degree 3	

Valve:	
Service	Water
Flow Characteristic	A-port equal percentage
Sizes	1-1/4, 1-1/2, 2, 2-1/2, 3
Type of end fitting	NPT female ends
Materials	
Body	forged brass, nickel plated
Ball	stainless steel
Stem	stainless steel
Seats	PTFE
Characterization Disc	Tefzel®
Packing	2 EPDM O-rings, lubricated
Body Pressure Rating	
1-1/4" - 2" (-248)	600 psi
2" (252) - 3"	400 psi
Maximum differential pressure (ΔP)	50 PSI
Leakage	0% for A to AB
External leakage	according to EN12266-1:2003
Cv rating	A-port: see product chart for values
Tefzel® is a registered trademark of DuPont	

NOTICE

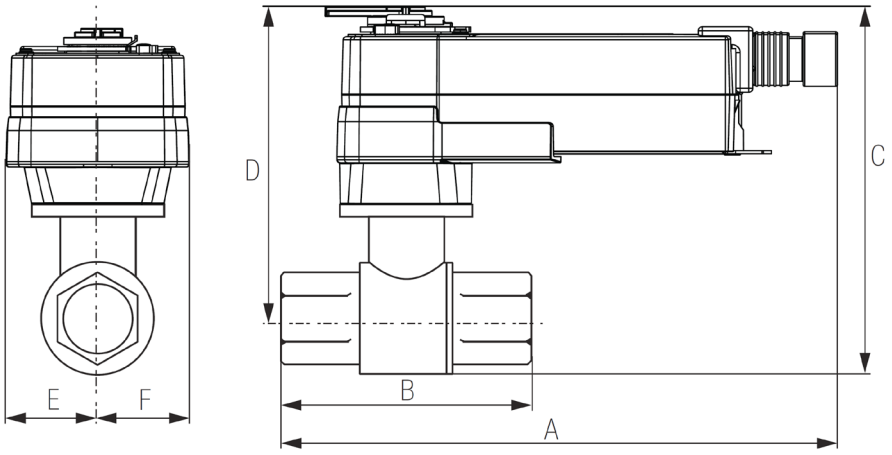
The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation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

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.

WATTS®

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

(A) Actuators with appliance cables are numbered.

1 Provide overload protection and disconnect as required.

3 Actuators may also be powered by 24 VDC.

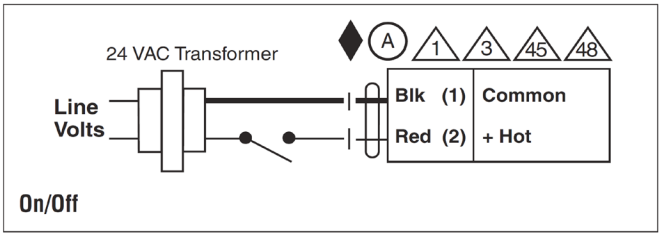
45 Actuators may be powered in parallel. Power consumption must be observed.

48 Parallel wiring required for piggy-back applications.

◆ 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 Differntial Pressure
RWA-ABV-231	1 1/4	25	600 psi	50 psi
RWA-ABV-232	1 1/4	37*	600 psi	50 psi
RWA-ABV-238	1 1/2	19	600 psi	50 psi
RWA-ABV-240	1 1/2	37*	600 psi	50 psi
RWA-ABV-248	2	29	600 psi	50 psi
RWA-ABV-252	2	85	400 psi	50 psi
RWA-ABV-253	2	120	400 psi	50 psi
RWA-ABV-254	2	240*	400 psi	50 psi
RWA-ABV-261	2 1/2	60	400 psi	50 psi
RWA-ABV-264	2 1/2	150	400 psi	50 psi
RWA-ABV-265	2 1/2	210*	400 psi	50 psi
RWA-ABV-277	3	70	400 psi	50 psi
RWA-ABV-278	3	130	400 psi	50 psi
RWA-ABV-280	3	170*	400 psi	50 psi

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)

USA: T: (978) 689-6066 • F: (978) 975-8350 • Watts.com
Canada: T: (905) 332-4090 • F: (905) 332-7068 • Watts.ca
Latin America: T: (52) 81-1001-8600 • Watts.com