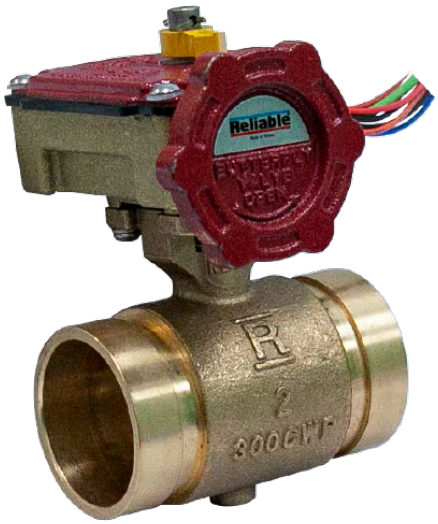
RBV SERIES - BRONZE BUTTERFLY VALVES



Grooved end



Threaded end

PRODUCT DESCRIPTION

The Reliable Model RBV series bronze butterfly valves are indicating control valves for fire protection systems. Model RBVT valves have ANSI B1.20.1 NPT threaded end connections and are available in 1" (25 mm), 1-1/4" (32mm), 1-1/2" (38mm), 2"(51mm), and 2-1/2" (65mm) nominal sizes. The Model RBVG valves have ANSI/AWWA C606 grooved end connections and are available in 1-1/4" (32mm), 1-1/2" (38mm), 2"(51mm), and 2-1/2" (65mm) nominal sizes. The valves are listed for 300 psi (20.7 bar) working pressure.

The valves have an integral 10 Amp pre-wired supervisory tamper switch assembly for indoor and outdoor use. The tamper switch signals movement of the valve seal from the full open position.

Model RBV series butterfly valves must be installed in accordance with NFPA 13, NFPA 72, FM Global Property Loss Prevention Data Sheets, and the requirements of any authorities having jurisdiction. Failure to follow installation instructions may void the warranty and listing of the valve. Verify compatibility of the valve materials with the water supply and the environment where the valve will be installed prior to installation.

The valve can be installed in any orientation on a piping system with standard ASME B1.20.1 NPT threaded (Model BFVT) or ANSI/AWWA C606 grooved (Model BFVG) connections. Install Model BFVT valves by applying PTFE-based thread sealant to the male pipe threads and tightening the threaded connection using a wrench on only the hexagonal wrench-flats of the valve. Over-tightening threaded connections may damage the valve body resulting in leakage. Attached Model BFVG valve using UL Listed or FM Approved grooved couplings.

The integral tamper switch assembly consistent of two switches. Switch 1 has dual leads on the terminals and is used for connection of the supervisory circuit of a listed fire alarm control panel.

Switch 2 has a single lead and is used for connection of the auxiliary equipment. A 14 ga. green wire is connected to the gearbox housing as a ground connection. All unused wires need to be capped with wire nuts and tucked into a junction box. All electrical connections must be in accordance with NFPA 72 and the requirements of any authorities having jurisdiction.

TABLE A. End Configuration Options

Model	End Connections	Sizes in (mm)	Approvals
RBVT	Threaded	1" (25)	UL Listed, FM Approved
		1 1/4" (32) 1 1/2" (38) 2" (51) 2 1/2" (65)	cULus Listed, FM Approved
RBVG	Grooved	1 1/4" (32) 1 1/2" (38) 2" (51) 2 1/2" (65)	cULus Listed, FM Approved

Model RBVT Bronze Butterfly Valve - Threaded End

Pressure Rating:
300 psi (20.7 bar).

End Connections
ANSI B1.20.1 NPT Threads.

Material Specifications

Body:
Bronze ASTM 584 C83600.

Disc:
SS304 Sheet Stamping.

Handwheel:
Ductile Iron ASTM A536.

Seat:
ASTM D2000 Viton.

Indicator:
Powder Metal FD0205 95HT.

Housing:
Forged Brass JIS C3771 (Ref. ASTM C37700).

Cover:
Forged Brass JIS C3771 (Ref. ASTM C37700).

Listings and Approvals

UL Listed:
All Sizes.

cULus Listed:
1-1/4" (32mm).
1-1/2" (38mm).
2" (51mm).
2-1/2" (65mm).

FM Approved:
All Sizes.



FIGURE 1. Threaded Components and Dimensions

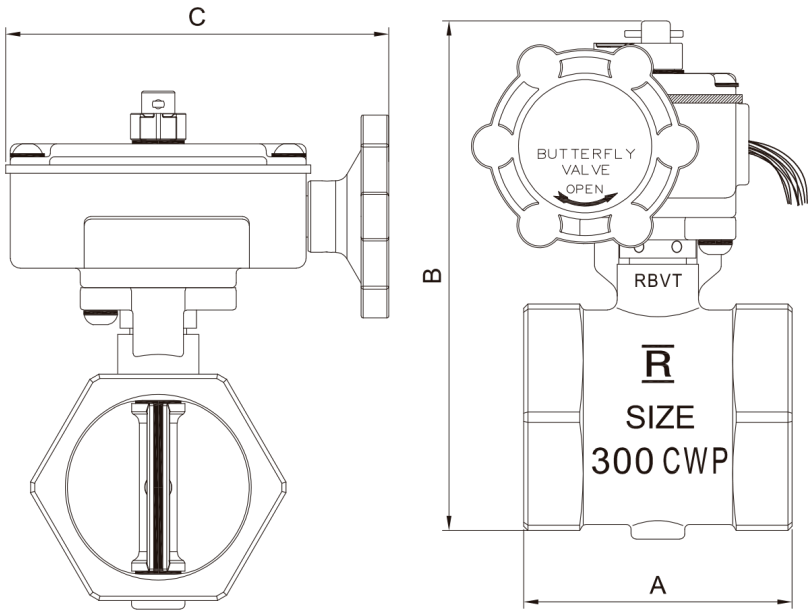


TABLE B. Threaded Dimensions

Valve Size	A	B	C
	mm	mm	mm
1"	54	125	118
1 1/4"	67	130	
1 1/2"	73	142	
2	83	156	
2 1/2"	114	167	

Model RBVT Bronze Butterfly Valve - Grooved End

Pressure Rating:
300 psi (20.7 bar).

End Connections:
ANSI/AWWA C606 grooves.

Material Specifications

Body:
Bronze ASTM 584 C83600.

Disc:
SS304 Sheet Stamping.

Handwheel:
Ductile Iron ASTM A536.

Seat:
ASTM D2000 Viton.

Indicator:
Powder Metal FD0205 95HT.

Housing:
Forged Brass JIS C3771 (Ref. ASTM C37700).

Cover:
Forged Brass JIS C3771 (Ref. ASTM C37700).

Listings and Approvals

cULus Listed.
FM Approved.

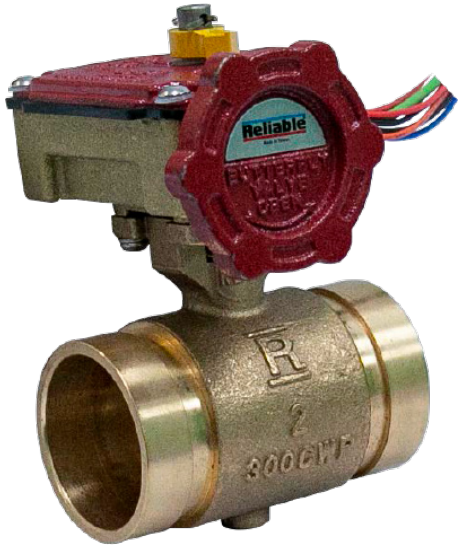


FIGURE 2. Grooved Components and Dimensions

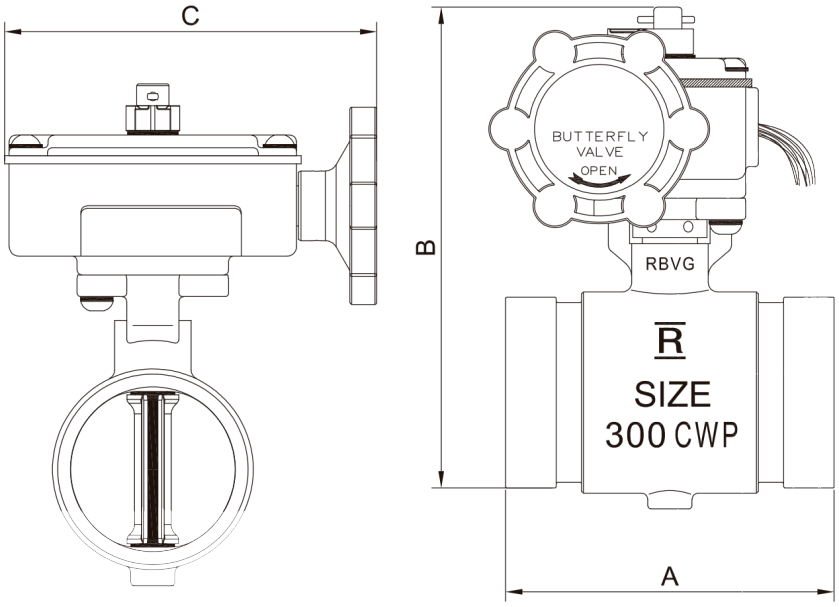


TABLE C. Grooved Dimensions

Valve Size	A	B	C
	mm	mm	mm
1 1/4"	98	132	118
1 1/2"	102	139	
2	104	154	
2 1/2"	114	167	

Switch shown in position with valve fully open.

FIGURE 3. SWITCH 1: Dual Leads Soldered to Switch Tabs

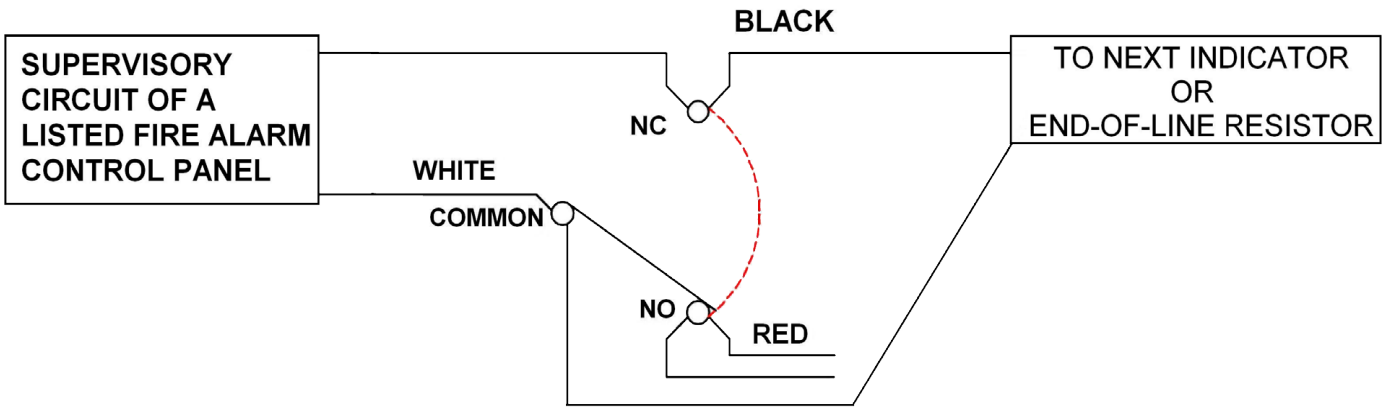
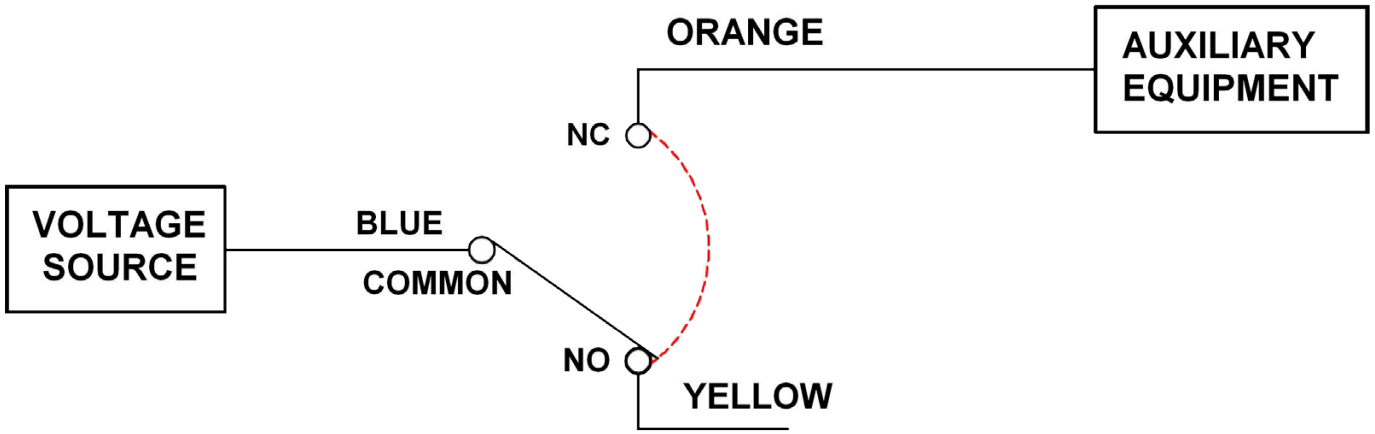


FIGURE 4. SWITCH 2: Single Leads Soldered to Switch Tabs



NOTES:

1. Green wire is provided as ground for the switch housing.
2. Switch rating: 10.1 Amps-125/250VAC-60Hz.
3. Actual switch application rating: 10 Amps/115 VAC-60Hz, 0.5 Amps/28 VDC.
4. Cap unused leads with wire nuts and tuck into a junction box (not provided).

MAINTENANCE

The owner is responsible for maintaining the fire protection system in proper operating condition. Any system maintenance or testing that involves placing a control valve out of service will eliminate the fire protection that is provided by the fire protection system.

The Reliable Bronze Butterfly valves and associated equipment shall periodically be given a thorough inspection and test. NFPA 25, "Inspection, Testing and Maintenance of Water Based Fire Protection Systems," provides minimum maintenance requirements.

GUARANTEE

For Reliable Automatic Sprinkler Co., Inc. guarantee, terms, and conditions, visit

ORDERING INFORMATION

Specify the following when ordering:

Valve Model:

RBVT (threaded).
RBVG (grooved).

Valve Size:

1" (25mm) (RBVT only).
1-1/4" (32mm).
1-1/2" (38mm).
2" (51mm).
2-1/2" (65mm).