Model REL363VWO & REL363VWC
Wafer Body Butterfly Valve

VdS-Certified
232 psi (16 bar)

Product Description

The Reliable butterfly valves are VdS-Certified for fire protection systems. Reliable REL363VWO and REL363OWC butterfly valves have ASME B16.34 / MSS SP-44 wafer lug end connections. The Model REL363VWO butterfly valve is supervised in the open position and the Model REL363VWC butterfly valve is supervised in the closed position. They are available in 3" (80 mm), 4" (100 mm), 5" (125 mm), and 8" (200 mm) nominal sizes. The valves are listed for 232 psi (16 bar) working pressure. The maximum working temperature for the valves is 212°F (100°C). These valves are available with two options for the wire harness: a standard 9" (0.23 m) set of wire leads, and a 39" (1 m) extended-length set of wire leads.

Verify compatibility of the Model 363VWO/VWC materials with the water supply and the environment where the valve will be used prior to installation.

Model REL363VWO Butterfly Valve - Supervised Normally Open

Model REL363VWC Butterfly Valve - Supervised Normally Closed

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 Supervised 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.

3" (80 mm) through 8" (200 mm) valves require approximately 10 full turns to move the valve from fully open to closed (or vice versa), at which time a mechanical stop will be encountered. Any attempt to further open or close the valve beyond the mechanical stop may result in damage to the valve.

See Technical Bulletin 840 for instructions on adjustment of mechanical stops if the butterfly seal does not fully seat with the valve handle in the closed position.

Guarantee

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

Ordering Information

Specify the following when ordering:

Supervision
- Supervised Normally Open (Yellow Indicator, Red Actuator)
- Supervised Normally Closed (Red Indicator, Yellow Actuator)

Valve Size
- 3" (80 mm)
- 4" (100 mm)
- 5" (125 mm)
- 8" (200 mm)

Wire Harness Length
- Standard: 9" (0.23 m)
- Optional: 39" (1 m)

Reliable Model REL363VWO and REL363VWC Butterfly Valve

Technical Specifications
Pressure Rating:
232 psi (16 bar)

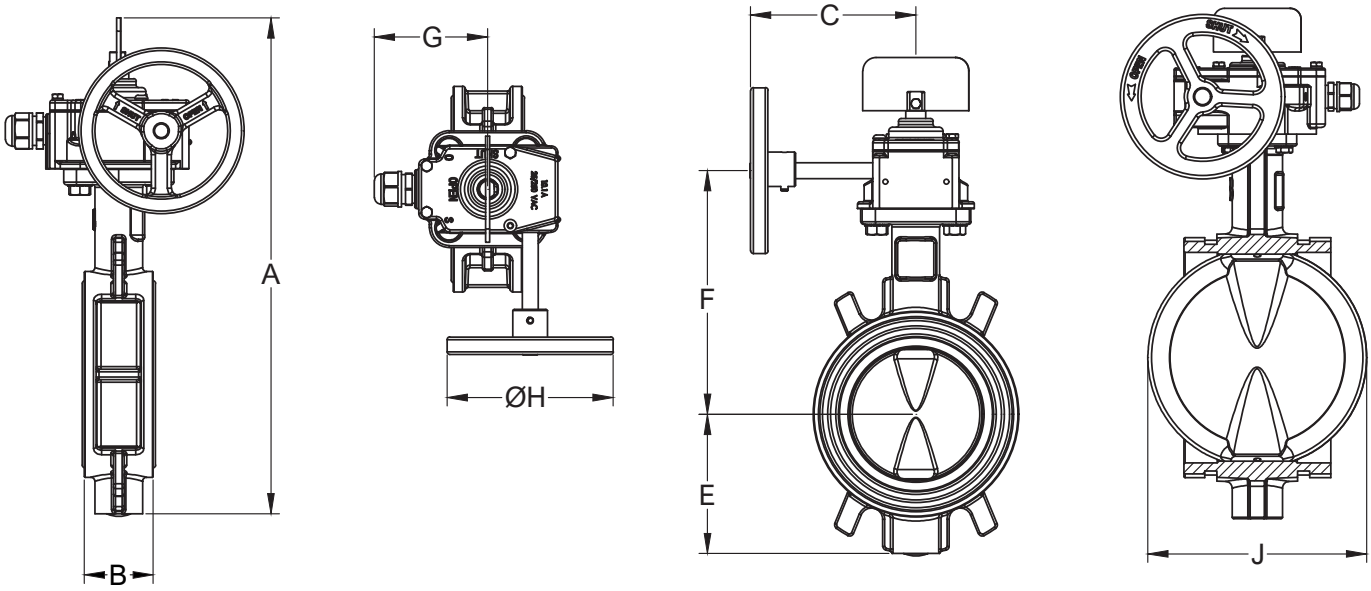
Material Specifications
Upper Stem: Stainless Steel ASTM A 276 Type 420
Upper Bearing: PTFE Bronze Sintered on Steel
Stem Seal O-Ring: EPDM
Body: Ductile Iron ASTM A 395, Epoxy Coated
Disc: Ductile Iron ASTM A 395 with EPDM Encapsulation
Lower Bearing: PTFE Bronze Sintered on Steel
Lower Stem: Stainless Steel ASTM A 276 Type 420
Dust Plug: PVC
Name Plate: Aluminum
Gear Operator: Cast Iron and Steel
Indicator Flag: Steel
Handwheel: Cast Iron
Cable Gland: Nickel plated brass
Plug: Carbon Steel (Zinc-plated)

Specifications
Grooves: ISO 6182
Taps: ASME B1.20.1

Listings and Approvals
VdS 2011-08en Certified

Applications
- Pressure pipe use
- Indoor and outdoor use
- Aboveground use only
- For use with steel pipe of any schedule or wall thickness and an appropriate flanged connection
- Not for submersible service

Reliable Model REL363VWO and REL363VWC Butterfly Valve Dimensions — **Figure 1**



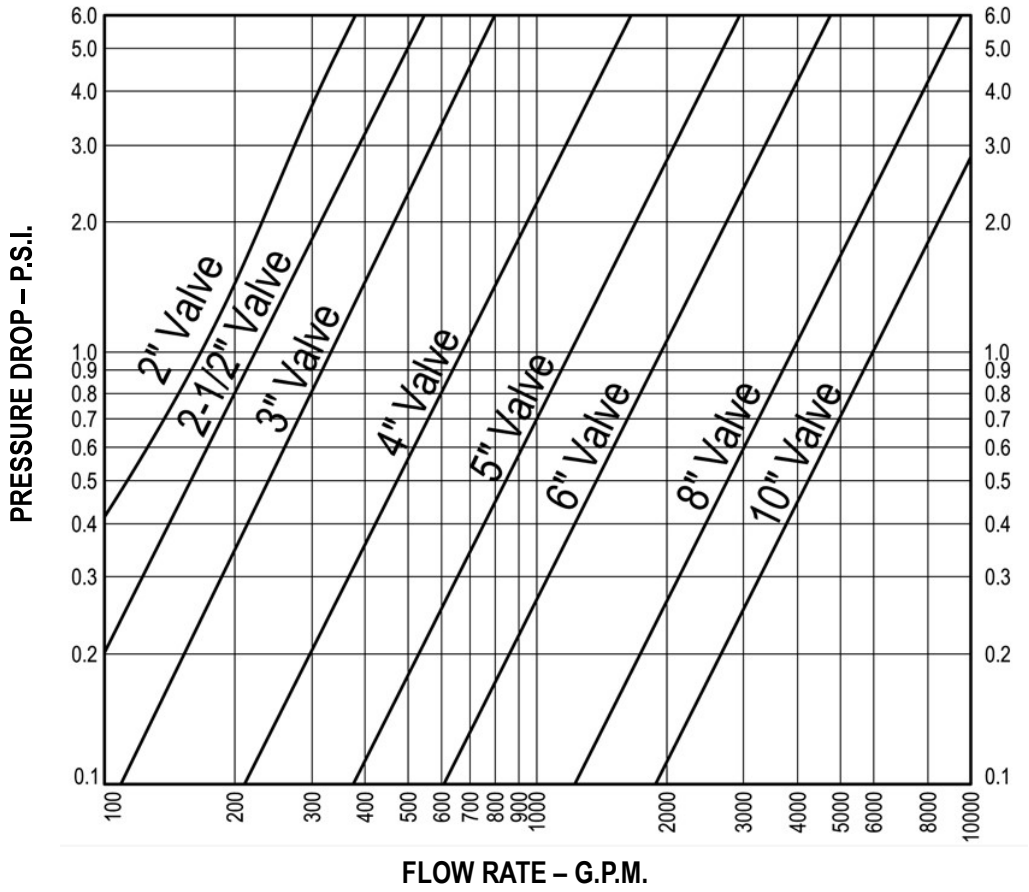
Model REL363VWO and REL363WC Dimensions - in. (mm) — **Table A**

Nominal Size	A	B	C	E	F	G	H	J	Weight lb (kg)
3” (80)	13-1/4 (337)	1-7/8 (46)	4-15/16 (125)	3-1/2 (90)	6-7/16 (163)	3-3/8 (85)	4-1/4 (108)	2-15/16 (75)	12.1 (5.5)
4” (100)	14-5/8 (373)	2-1/16 (52)	4-15/16 (125)	4-1/8 (105)	7-1/4 (183)	3-3/8 (85)	4-15/16 (125)	3-15/16 (100.5)	15.6 (7.1)
5” (125)	16-1/8 (410)	2-1/4 (56)	6-5/8 (168)	4-13/16 (122)	8-1/8 (207)	3-5/8 (92)	5-15/16 (150)	4-15/16 (125)	25.4 (11.5)
8” (200)	19-7/16 (494)	2-3/8 (60)	6-5/7 (168)	6-1/2 (165)	9-3/4 (248)	3-5/8 (92)	5-15/16 (150)	7-7/8 (200)	42.1 (19.1)

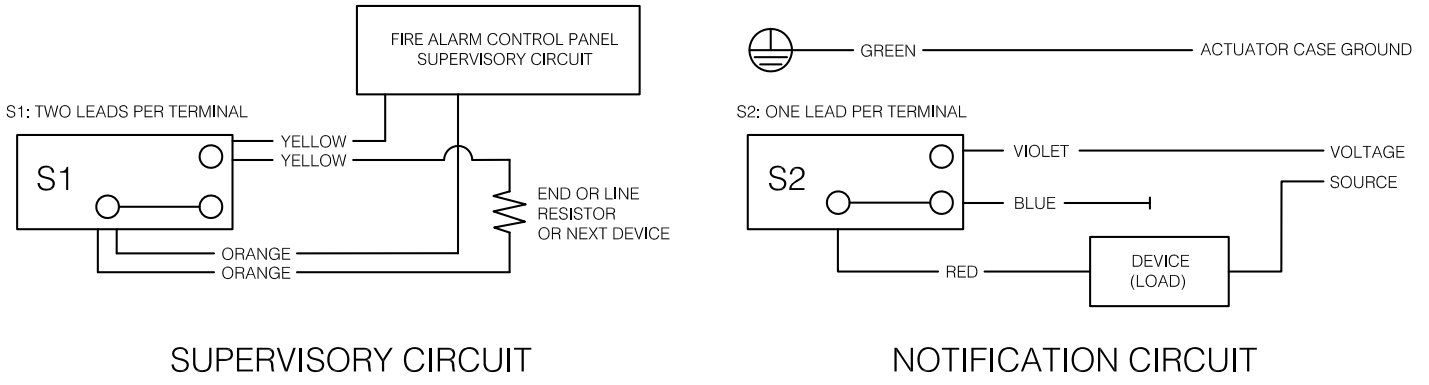
Valve Flow Characteristics **Table B**

Pipe Size NPS (DN)	Full-Open Flow Coefficient (Cv) Calculated using GPM and PSI units	Pressure Loss at Flow Velocity of 5.0 m/s psi (mbar)
3 (80)	374	1.7 (120)
4 (100)	710	1.5 (100)
5 (125)	1200	1.3 (90)
8 (200)	3874	0.9 (60)

Reliable Model REL363VWO and REL363VWC Performance Data **Figure 2**

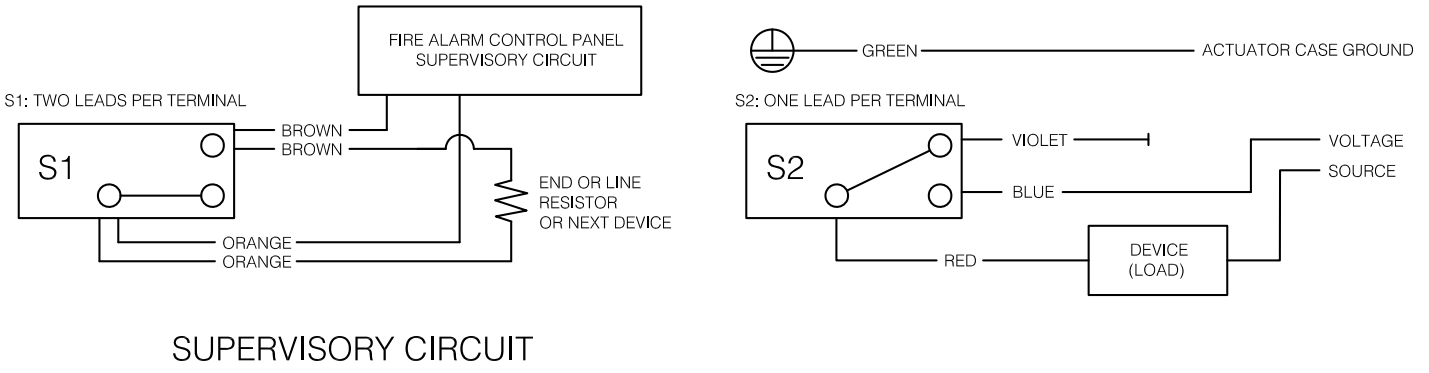


Reliable Model REL363VWO Wiring Diagram - Supervised Normally Open **Figure 2**



NOTES:
1. WIRING SHOWN IS FOR NORMALLY OPEN CIRCUITS.
2. CAP ALL ENDS OF UNUSED WIRES.
3. SWITCH RATING: 10.1A, 125/250 VAC

Reliable Model REL363VWC Wiring Diagram - Supervised Normally Closed **Figure 3**



NOTES:
1. WIRING SHOWN IS FOR NORMALLY OPEN CIRCUITS.
2. CAP ALL ENDS OF UNUSED WIRES.
3. SWITCH RATING: 10.1A, 125/250 VAC

Installation / User Guide

1. This valve is intended for use in fire protection systems ONLY.
2. Note that a “normally-open” valve (red gearbox / tamper switch housing with yellow flag) will provide no signal to the fire protection system control panel when fully open, when the valve is partially closed it will send a signal and cause an alarm code to display on the fire protection system control panel.
3. Note that a “normally-closed” valve (yellow gearbox / tamper switch housing with red flag) will provide no signal to the fire protection system control panel when fully closed, when the valve is partially open it will send a signal and cause an alarm code to display on the fire protection system control panel.
4. Valve outlets are flanged and shall be connected to pipe or fittings with a compatible flanged interface manufactured to the latest edition of ASME B16.34 or MSS SP-44.
5. Flanged interface (including both groove and pipe-end seal surface features) shall be inspected for injurious defects or damage that will prevent sealing prior to installation.
6. Suitable flange fasteners (nuts and bolts) and gaskets shall be used to connect these butterfly valves to pipe or fittings. Fasteners shall be installed using instructions and fastener torque provided by ASME B16.34 or MSS SP-44 or recommendations provided by manufacturer of mating equipment to which these butterfly valves are being installed.
7. It is recommended that flanged pipe or fittings to which these butterfly valves are connected be UL-listed, FM-approved, or VdS-certified.
8. Valve contains no user-serviceable parts. For concerns relating to replacement of drive key, factory-installed tamper switch, valve disc, or other factory-installed components, please contact Reliable Automatic Sprinkler Company for a replacement product.

P/N 9999970808