

Data Sheet 1.63 Issue F

Wafer Butterfly Valve Fig. 215



Rapidrop Figure 215 Wafer Butterfly Valve is a rotary type valve with a visual indication of whether the valve is in fully open position or not. Butterfly valves are commonly used in fire protection systems as system control valves, sectional or pump water control valves. These valves have been designed with minimum flow restriction and pressure loss when in fully open position. To reduce the risk of a water hammer Rapidrop Butterfly Valves are provided with a slow close hand wheel operation gearbox.

Valves supplied as standard with a 1m flying lead.

Maximum Working Pressure

20.7 bar (300 psi) FM Approved, UL Listed, CNBOP 16.0 bar (232 psi) VdS

Temperature Range

0° - 80°C

Coating

Fusion Bonded Epoxy Coating in accordance with ANSI /AWWA C550

Design Standard

MSS SP-67

Flange Specification

- ANSI/ASME Class 125/150
- BS EN 1092 PN16
- ISO 2084
- DIN 2501

Gearbox Mounting Flange

ISO 5211

Dimensions

| Sizes Dimensions (mm) | | | | | | | Dresturet | | | |
|-----------------------|--------|-----------------|-----|------|-----|-----|-----------|-----|--------|---------------------|
| 31205 | | Dimensions (mm) | | | | | | | Weight | Product Ordering |
| mm | inch | A | | С | D | E | | G | (Kg) | Code |
| DN 50 | 2" | 141 | 65 | 43±2 | 93 | 123 | 127 | 202 | 8.5 | RD215-050FL |
| DN 65 | 2 1/2" | 153 | 71 | 46±2 | 104 | 123 | 127 | 202 | 8.9 | RD215-065FL |
| DN 80 | 3" | 158 | 81 | 46±2 | 124 | 123 | 127 | 202 | 9.5 | RD215-080FL |
| DN 100 | 4'' | 176 | 95 | 52±2 | 150 | 123 | 127 | 202 | 10.9 | RD215-100FL |
| DN 125 | 5" | 191 | 111 | 56±2 | 177 | 123 | 127 | 202 | 12.6 | RD215-125FL |
| DN 150 | 6'' | 203 | 133 | 56±2 | 205 | 123 | 127 | 202 | 16.3 | RD215-150FL |
| DN 200 | 8" | 244 | 164 | 60±2 | 257 | 123 | 185 | 260 | 21.7 | RD215-200FL |
| DN 250 * | 10" * | 273 | 196 | 68±2 | 316 | 123 | 185 | 260 | 30.8 | RD215-250FL |
| DN 300 * | 12" * | 311 | 226 | 78±2 | 370 | 132 | 203 | 298 | 44.6 | RD215-300FL |

* Not UL Approved

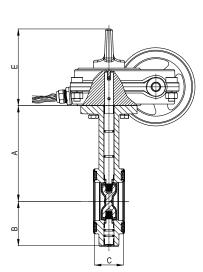
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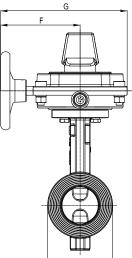
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Installation

Rapidrop Figure 215 Butterfly Valve is suitable for indoor and outdoor use. The valve may be installed in any position and the flow may be from either direction through the valve.

The use of additional flange gaskets is not necessary as the valve is self-sealing when connected to the piping system with appropriate flanges (ANSI/ASME Class 125/150, ISO 2084, DIN 2501 & BS EN 1092 PN16).

Valves should be supported independently to prevent the movement and stresses from the connecting piping system.

1. Ensure that the valve is in closed or almost closed position.

- 2. Visually inspect the valve, make sure the seating area is not damaged and that the connecting flanges are clean of debris and any foreign materials.
- 3. Insert the valve between the flanges and hand-tighten all flange bolts. Do not use flange gaskets. Do not apply lubricant to the seat faces as this may damage the seat material. Make sure valve is installed centrally between mating flanges.
- 4. Before fully tightening the bolts, slowly open the valve and check for any interference with the piping system.
- 5. If the valve opens freely, tighten all flange bolts using the crossover method. Recommended tightening torque is listed in the table.
- 6. After tightening the bolts check the operation by fully opening and closing the valve.

Care and Maintenance

Rapidrop butterfly valves require no regular maintenance, however it is advisable to inspect and verify proper operation of the unit annually or in accordance with the authority having jurisdiction.

The inspection should include a visual check for leakage at the pipe connection and body to gearbox connection. Inspection and maintenance should be performed by a competent person in accordance with national codes/ requirements.

Debris in the piping system might cause difficulties in closing the valve, this problem can be fixed by backing off the handwheel and closing the valve again.

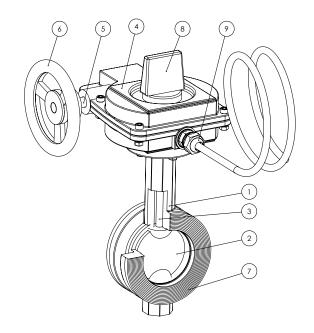
Rapidrop Figure 215 Wafer Butterfly Valves are suitable for both indoor and outdoor use. Minor degradations of surface finish should not affect the performance of the valve.

The valve should never be forced to seat by applying a wrench to the hand wheel as this may distort the valve components or score the sealing surface. The use of excessive force to open or close the valve violates all warranties.

The valve should not be used to force a pipeline into position as this may result in the distortion of the valve body.

Recommended Bolt Tightening Torque

| Size | Recomended Minimum Torque |
|---------------------------|------------------------------|
| DN50 - DN100 2'' - 4'' | 30 - 40 Nm |
| DN125 - DN200 5" - 8" | 45 - 70 Nm |
| DN250 10'' | 75 - 100 Nm |
| DN 300 12" | 110 - 150 Nm |



Material Specification

| No | Description | Materials | | |
|----|-----------------|---------------------|--|--|
| 1 | Valve Body | Ductile Iron | | |
| 2 | Disc | Ductile Iron + EPDM | | |
| 3 | Stem | Stainless Steel | | |
| 4 | Gearbox | Ductile Iron | | |
| 5 | Handwheel Shaft | SS431 | | |
| 6 | Handwheel | Ductile Iron | | |
| 7 | Seal | EPDM | | |
| 8 | Indicator | Ductile Iron | | |
| 9 | Cable Gland | Plastic | | |

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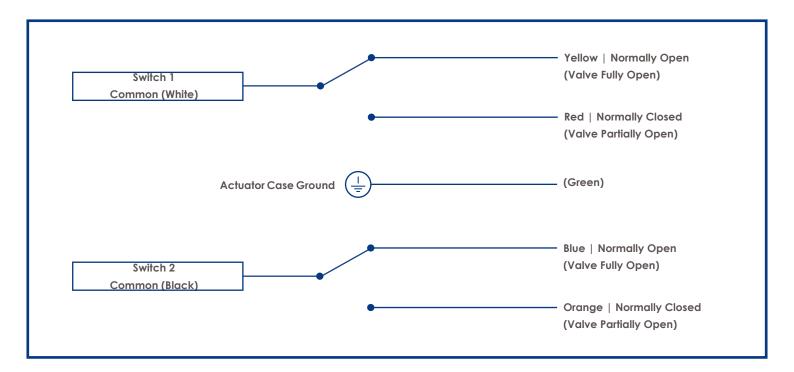
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Switch Installation

An internal, factory installed, double tamper switch with 1m cables provide easy supervision of the valve. Within two handwheel turns from the "OPEN" position the switch will close indicating that the valve is not fully open.



Important Installation Information

- Rapidrop Figure 215 Wafer Butterfly Valve must only be installed by a competent person in accordance with requirements of the local authority having jurisdiction. Deviations from these standards will invalidate warranty.
- It is the responsibility of the installing contractor to include a copy of this document in the sprinkler system installation, operating and maintenance manual.
- Alterations to Rapidrop products will void any warranty.
- Figure 215 Wafer Butterfly Valve should be inspected and maintained during routine sprinkler system inspections by a competent person in accordance with national codes/requirements.
- Failure to follow these instructions could cause improper operation, resulting in personal injury and/or property damage.
- For further details and technical support please contact your Rapidrop sales representative.

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