Data Sheet 1.63
Issue F

G417019

063-UWB-0315

Wafer Butterfly Valve
Fig. 215

Product Description

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

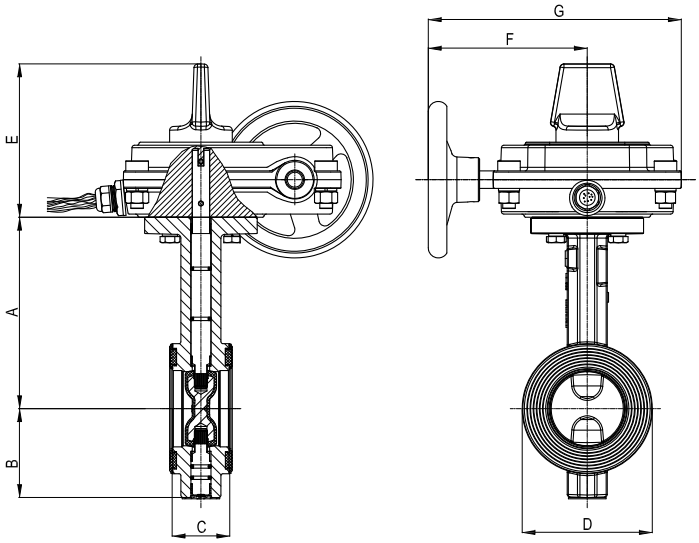
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Flange Specification

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

Gearbox Mounting Flange

ISO 5211



Dimensions

Sizes		Dimensions (mm)							Weight (Kg)	Product Ordering Code
mm	inch	A	B	C	D	E	F	G		
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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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.

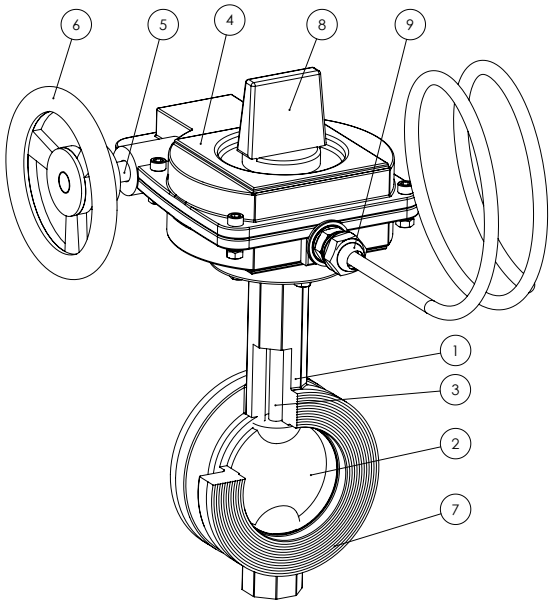
Rapidrop Figure 215 Wafer Butterfly Valves are suitable for both indoor and outdoor use. Minor degradations of surface finish should not affect the performance of the valve.

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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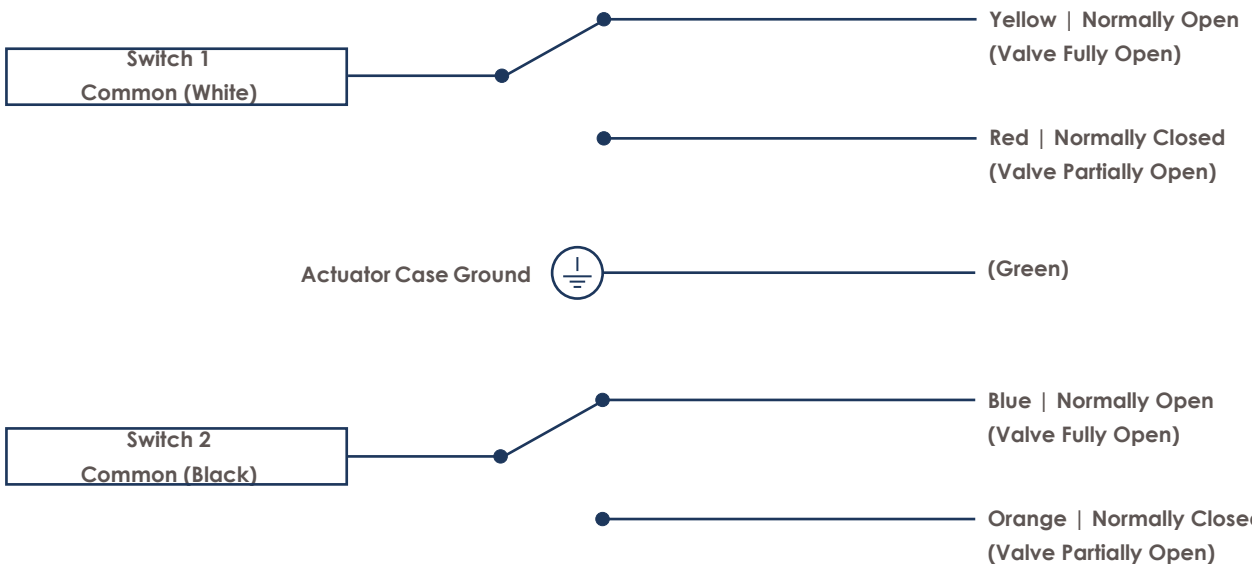
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Switch Installation

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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