

Data Sheet 1.28 Issue E

Wafer Butterfly Valve Model: 203

Product Description

Rapidrop Figure 203 Wafer Butterfly Valve is a rotary type valve with a visual indication (flag height 100mm) 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 gear operator with two internal CE approved switches with 1 meter flying lead. One switch indicates upon opening, the second switch indicates upon closing. External extended bolts to adjust open/close position of the disc. The valve can be supplied with padlock and chain for APSAD requirements.

Maximum Working Pressure

20.7 bar (300 psi)

Temperature Range

0°C to 100°C (32°F to 212°F)

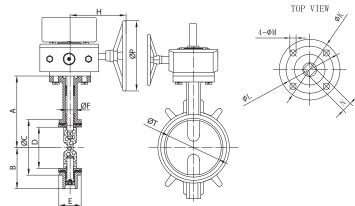
Connections

PN16 flange according to BS EN 1092 Class 125/150 flange according to ANSI B16.1

Standards

Valve complies with EN 593/BS 5155/MSS SP-67 Gearbox mounting flange ISO 5211 Face to face distance complies with EN 558 series 20





Dimensions

Sizes		Dimensions (mm)												Weight	Product	
mm	inch	Α	В	ØС	D	ØT	Е	ØF	ØK	ØL	ØМ	N	Н	ØP	(kg)	Ordering Code
DN50	2"	161	80	90	47.2	53.3	43	12.7	90	70	10	9	155	145	7.8	RD203-050APSAD
DN65	21/2"	175	89	104	60.2	65.1	46	12.7	90	70	10	9	155	145	8.6	RD203-065APSAD
DN80	3"	181	95	119	75.9	79.5	46	12.7	90	70	10	9	155	145	8.9	RD203-080APSAD
DN100	4''	200	114	156	98.9	104.8	52	15.9	90	70	10	11	155	145	10.2	RD203-100APSAD
DN125	5"	213	127	183	117.1	124	56	19.1	90	70	10	14	155	145	12.3	RD203-125APSAD
DN150	6''	226	145	211	148.9	156.5	56	19.1	90	70	10	14	155	145	13.3	RD203-150APSAD
DN200	8''	260	175	260	196.3	203.5	60	22.2	125	102	12	17	235	290	17.7	RD203-200APSAD
DN250	10"	292	220	318	243	250.9	68	28.6	125	102	12	22	235	290	29.8	RD203-250APSAD
DN300	12''	337	242	377	292.8	302	76.5	31.8	125	102	12	22	235	290	40.8	RD203-300APSAD
DN350	14''	368	277	415	325.9	333.8	74.5	31.8	150	125	14	22	235	290	55.7	RD203-350APSAD
DN400	16''	400	302	484	380	390.1	85.7	33.15	150	125	14	24	235	390	72.4	RD203-400APSAD

Note: Valve is APSAD approved only when it is supplied with chain and padlock Note: DN350 and DN400 valves are not APSAD approved even if supplied with chain and padlock

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Installation

Rapidrop Figure 203 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.
- 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.
- After tightening the bolts check the operation by fully opening and closing the valve.



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.

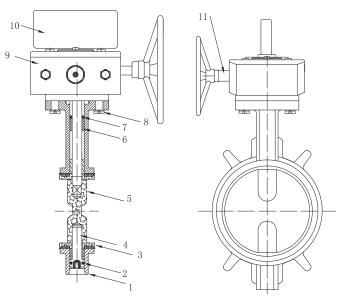
The inspection should include a visual check for leakage at the pipe connection and body to gearbox connection. Inspection and maintenance should be performed by a competent person in accordance with national codes/requirements.

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 203 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.

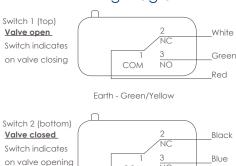
The valve should not be used to force a pipeline into position as this may result in the distortion of the valve body.



Material Specifications

Part No.	Description	Material
1	Body	GGG40
2	O-Ring	ASTM D2000 NBR
3	Seat	EPDM
4	Shaft	ASTM A582 SS431
5	Disc	GGG40
6	Short Bushing	PTFE
7	O-Ring	ASTM D2000 NBR
8	Bolts	SS304
9	Gearbox	-
10	Indicator Flag	-
11	Gear Box Shaft	SS410

Wiring Diagram



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