

Data Sheet 1.111 Issue B



Grooved Butterfly Valve Fig.212

Product Description

Rapidrop Fig.212 Grooved 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 operated gearbox.

Maximum Working Pressure

20.7 bar (300 psi)

Temperature Range

0°C - 120°C

Coating

Fusion Bonded Epoxy Coating in accordance with ANSI /AWWA C550

Design Standard

MSS SP-67

Connections Groove to AWWA C606

Approvals

FM Approved UL Listed





Dimensions

Sizes		Dimensions (mm)									Weight
mm	Inch	A	В	OD	øc	ØD	E	н		ØD1	kg
DN 50	2"	95	78	60.3	72	150	148	130	84.5	50.1	6
DN 65	2 1/2"	98	78	73.0	88	150	148	133	98	62	7
DN 65	2 1/2"	98	78	76.1	88	150	148	133	98	60	7
DN 80	3"	105	85	88.9	98	150	148	140	98	75.6	9
DN 100	4"	135	105	114.3	127	150	148	170	116	98.1	10
DN 125	5"	148	128	139.7	156	200	148	183	149	125.5	
DN 125	5"	148	128	141.3	156	200	148	183	149	125.5	
DN 150	6"	165	140	165.1	185	200	148	200	147.6	150.6	12
DN 150	6"	165	140	168.3	185	200	148	200	147.6	150.6	12
DN 200	8"	204	170	219.1	235	350	226	241.5	134	204.4	21
DN 250	10"	245	205	273.0	292	350	226	282.5	160	246	39
DN 300	12"	277.5	258.3	323.9	332.5	350	226	315	165	296.3	44

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Installation

Rapidrop Fig.212 Grooved 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. 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 faces are clean of debris and any foreign materials.
- 3. Using appropriate grooved couplings connect the valve with adjacent pipe or fitting. Follow the instructions supplied by the manufacturer of the couplings.
- 4. 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 Fig.212 Grooved 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. 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 Specification

Part No	Part Description	Materials
1	Body	Ductile Iron
2	Gland	Steel
3	Philips Countersunk Head Screw	Carbon Steel Galvanized
4	Bushing	Nickel Aluminium Bronze
5	Top Shaft	Stainless Steel 410/416/420
6	Disc	Ductile Iron + EPDM
7	Under Shaft	Stainless Steel 410/416/420
8	Adjust Washer	Nickel Aluminium Bronze
9	Plug	Carbon Steel Galvanized
10	Electical Signals Worm Gear Box	
11	Hexagon Head Bolts	Stainless Steel 304
12	Spring Washer	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Pin	Carbon Steel Galvanized

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Switch Installation

Factory installed two SPDT switches to supervise the valve open or close position. Within two handwheel turns from the "OPEN" position the switch will close indicating that the valve is not fully open.



(Valve fully open)

Switch1 (S-1): For connection to supervisory circuit of a alarm control panel.

Switch2 (S-2): Auxiliary switch for connection to a local device.

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