



# OS&Y Resilient Wedge Flanged Gate Valve Fig. 103FF

## Product Description

Rapidrop Fig.103FF Valve is a manually operated, outside screw & yoke resilient wedge gate valve designed for use in fire protection systems for on/off operation only. The lightweight ductile iron body allows for easier handling and reduced shipping costs. Valves are suitable for both vertical and horizontal installation. Valve components are corrosion resistant or coated with a thermally applied fusion-bonded epoxy. The EPDM encapsulated ductile iron wedge with a compression mechanism is designed to achieve water tight sealing and low torque operation. The stem is pre notched to accommodate OSY2 limit switch.

## Maximum Working Pressure

DN65 - DN250 (2½" - 10") : 20.7 bar (300 PSI)  
DN300 - DN400 (12" - 16") : 17.2 bar (250 PSI)

## Maximum Working Temperature

71°C / 160°F

## Coating

Fusion Bonded Epoxy Coating in accordance with ANSI /AWWA C550

## Flange Specification

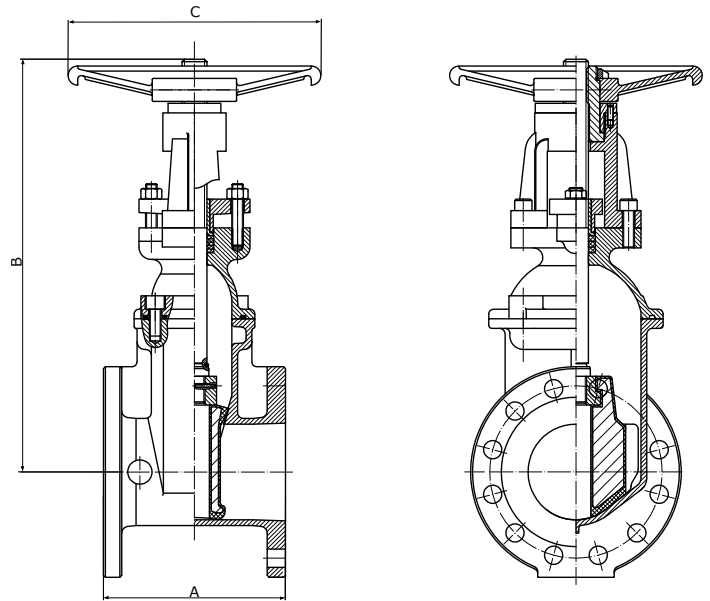
ANSI 125/ANSI 150 flat face (raised face available on request)  
PN16 raised face

## Approvals

FM Approved  
UL Listed

## Design Standard

Conforms to AWWA C509-09



## Sizes

Sizes		Dimensions (mm)				Turns to Open	Weight (Kg)	Product Ordering Code	
mm	Inch	A	B (Open)	B (Closed)	C			ANSI	PN16
DN 65	2½"	190	453	378	200	8.8	20	RD103FF065A	RD103FF065
DN 80	3"	203	500	405	200	10.5	24	RD103FF080A	RD103FF080
DN 100	4"	229	534	422	260	13	43	RD103FFRD100A	RD103FFRD100
DN 150	6"	267	744	581	315	15.7	70	RD103FF150A	RD103FF150
DN 200	8"	292	939	724	375	17.2	112	RD103FF200A	RD103FF200
DN 250	10"	330	1139	877	416	21.4	159	RD103FF250A	RD103FF250
DN 300	12"	356	1326	1014	445	25.5	220	RD103FF300A	RD103FF300
DN 350	14"	381	1592	1226	500	44	322	RD103FF350A	RD103FF350
DN 400	16"	406	1682	1288	500	50	415	RD103FF400A	RD103FF400

Note: Ordering codes for European countries.

For other areas please contact your local Rapidrop sales representative.



## OS&Y Resilient Wedge Flanged Gate Valve Fig. 103FF

### Installation

Rapidrop Figure 103FF Flanged Gate Valve is suitable for indoor and outdoor use. The valve should be installed in a location easily accessible for operation and maintenance. 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. Visually inspect the valve, make sure that the connecting flanges are clean of debris and any foreign materials.
2. Ensure that valve is in the closed position during handling and installation process.
3. Insert the valve with appropriate gaskets between the flanges and tighten all flange bolts using the crossover method.
4. After tightening the bolts check the operation by fully opening and closing the valve.
5. Before pressurising the system make sure the valve is in fully open position.

### Material Specification

No	Description	Material
1	Valve Body	Ductile Iron ASTM A 536
2	Resilient Wedge	Ductile Iron ASTM A 536 EPDM ASTM D 2000
3	Bonnet	Ductile Iron ASTM A 536
4	Stem	Bronze ASTM B 150 UNS C61400 Optional Stainless Steel ASTM A276
5	Gland	Gray Cast Iron ASTM A126-B
6	Yoke	Ductile Iron ASTM A 536
7	Handwheel	Ductile Iron ASTM A 536
8	Locknut	Carbon Steel Zinc Plated
9	Gland Nut	Brass ASTM B16-H02
10	Stem Packing	EPDM ASTM D 2000

### Care and Maintenance

The valve should never be forced to seat by applying a wrench to the handwheel 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 damage of the valve components.

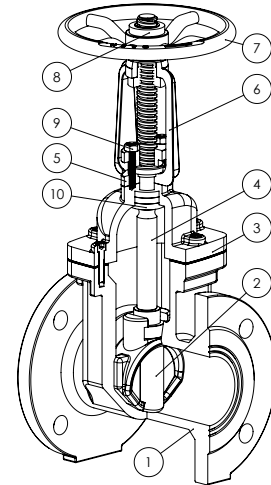
Rapidrop gate valves require no regular maintenance, however it is advisable to inspect and verify proper operation of the unit annually or in accordance with the authority having jurisdiction.

The inspection should include a visual check for leakage at the pipe connection and the stem. In case of leakage around the stem area, tighten the gland nuts (9) evenly approximately a quarter turn in clockwise direction.

It is recommended to shut down the system if repacking the valve is necessary. 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 overcome by backing off the handwheel and closing the valve again.

Rapidrop Figure 103FF Flanged Gate Valves are suitable for both indoor and outdoor use. Minor degradations of surface finish should not affect the performance of the valve.



### Important Installation Information

- Rapidrop Figure 103FF Flanged Gate 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 103FF Flanged Gate 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.