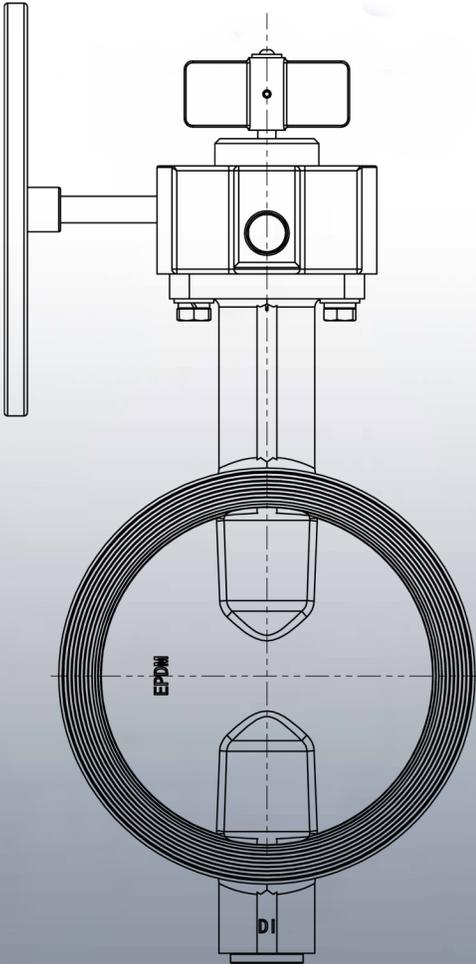


# Century



Model 240-W  
Butterfly Valve Wafer Type  
Installation and Maintenance Manual



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# Century

## Operation and installation manual for Century Wafer Butterfly Valve Model 240W

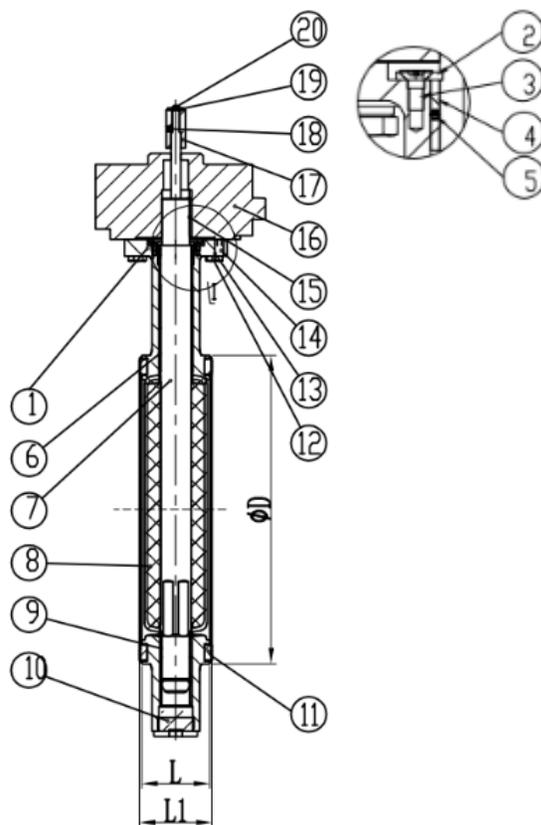
This document is an inspection, installation, and maintenance manual for the Century Wafer Butterfly Valve Model 240W. It details the valve's components and proper installation procedures to ensure longevity and functionality. The manual also provides step-by-step instructions for inspection, operation, and routine maintenance.

Emphasis is placed on safety precautions during all procedures; this will ensure reliable operation and the longevity of the equipment.

### Components:

The Century Model 240W Butterfly Valve is made of various high-quality parts.

Item	Name
1	Body
2	Gland
3	Cross Recessed Countersunk Head Screw
4	O-Ring
5	Retainer
6	Long Shaft Sleeve
7	Shaft
8	Disc
9	Lower Shaft Sleeve
10	Hex Socket Plug
11	Sealing Ring
12	Hexagon Head Bolt
13	Spring Gasket
14	Flat Gasket
15	Flat Key
16	Electrical Turbine Box
17	Indicator
18	Inner Hexagon Cone end Set Screw
19	Inner Socket Flat Round Head Screw
20	Large Flat Pad Class A



## PRE-INSTALLATION INSPECTION

### Proper Storage:

If storage is required, keep the valve in a cool, dry environment with end protectors in place. Prior to installation, re-inspect the unit to verify its condition.

### 1. Inspect for Shipping Damage

- Visually inspect the entire valve assembly for any cracks, dents, or other damage sustained during transit.
- Subsequently, operate the handwheel through one full cycle (open to close and back) to confirm the smooth mechanical action of the shaft (Item 7) and disc (Item 8).

### 2. Verify External Components

Confirm that all bolts and nuts on the Electrical Turbine Box (Item 16) and supervisory switch are secure and have not loosened during shipment.

### Handling Notice:

- Handle with care at all times to protect the EPDM sealing surfaces on the disc (Item 8).
- Lift only by the valve body (Item 1).
- Never lift, carry, or support the valve by the handwheel or gear operator. Applying force to these components can damage the operator and compromise valve alignment.

## INSTALLATION GUIDELINES

### 1. Verify Valve Specifications

- Before installation, confirm that the valve's model (240W), size, and pressure rating match the requirements listed in the system engineering plans.

### 2. Prepare Mating Surfaces

- Thoroughly clean the valve faces and the mating pipe flanges. Ensure all surfaces are completely free of dirt, rust, debris, and any foreign materials that could compromise the integrity of the seal.

### 3. Select and Inspect Gaskets

- Use two new gaskets rated for the system's maximum operating pressure and temperature. Visually inspect the gaskets to confirm they are free from defects. Do not use a damaged gasket.

### 4. Valve Installation

- **CRITICAL:** Ensure the disc (Item 8) is in the slightly open position (approx. 10°) before installation. This prevents the disc edge from being pinched or damaged by the pipe flanges during installation.
- Align the piping and carefully spread the flanges apart just enough to slip the wafer valve body between them.

- Insert the valve between the flanges, ensuring the alignment holes on the valve body (Item 1) line up with the flange bolt holes.
- Insert all long through-bolts. Hand-tighten the nuts to hold the assembly in place.
- Tighten the nuts incrementally using a star or crisscross pattern to ensure uniform pressure on the gaskets and to avoid damaging the valve body.

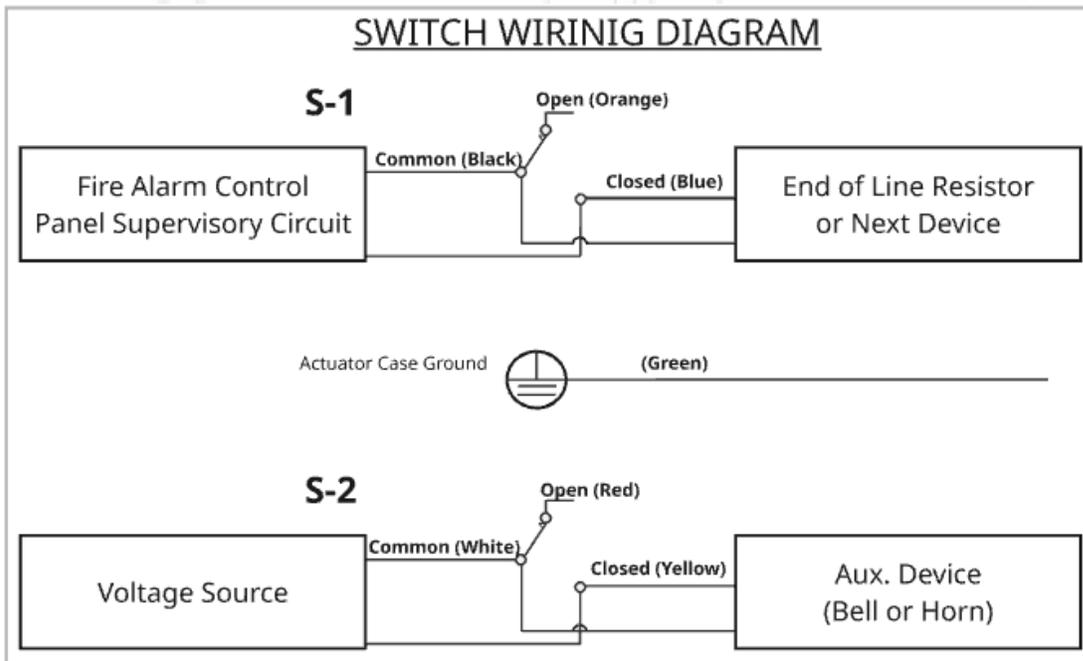
**WARNING:** Wafer valves are NOT suitable for dead-end service. The downstream piping cannot be removed while the line is under pressure, as the valve is held in place by the compression of the entire flange-to-flange assembly.

#### 5. System Flushing

- After completing the installation and before pressurizing the system, thoroughly flush the interior of the valve and piping to remove all installation debris.

**WARNING:** All electrical wiring must be performed by a qualified electrician in accordance with all applicable local and national electrical codes. Disconnect power source before wiring to prevent electrical shock.

- **Contact Rating:** 5A 250VAC



## OPERATING INSTRUCTIONS

### Operation:

- **Opening:** Rotate the handwheel counterclockwise until it stops. It is recommended to then turn the handwheel clockwise approximately one-half turn to prevent thermal binding.
- **Closing:** Rotate the handwheel clockwise until it reaches a firm mechanical stop.

### Safety Notices:

- **Prohibited Practices:** Never use "cheater bars" or other leverage devices on the handwheel.
- **On/Off Service Only:** Do not use this valve for throttling.

## MAINTENANCE

Century butterfly valves require no regular lubrication or internal maintenance. However, an annual inspection is required to ensure proper operation.

- **Pre-Maintenance Safety:** Before any inspection, ensure the line is fully depressurized.
- **Annual Inspection:**
  - Visually check for any signs of leakage at the flange connections and at the body (Item 1)-to-operator connection.
  - Operate the valve through one full OPEN/SHUT cycle to verify smooth operation.
- **System Pressure Testing:** When pressure testing the piping system, ensure the valve disc (Item 8) is in the FULLY OPEN position to equalize pressure and prevent damage.

By following these maintenance steps, Century butterfly valve will remain in proper working condition and ready to provide long and reliable service.

Please contact us at [sales@centuryvalves.com](mailto:sales@centuryvalves.com) for all your valves and hydrant needs.