



Simple & Reliable

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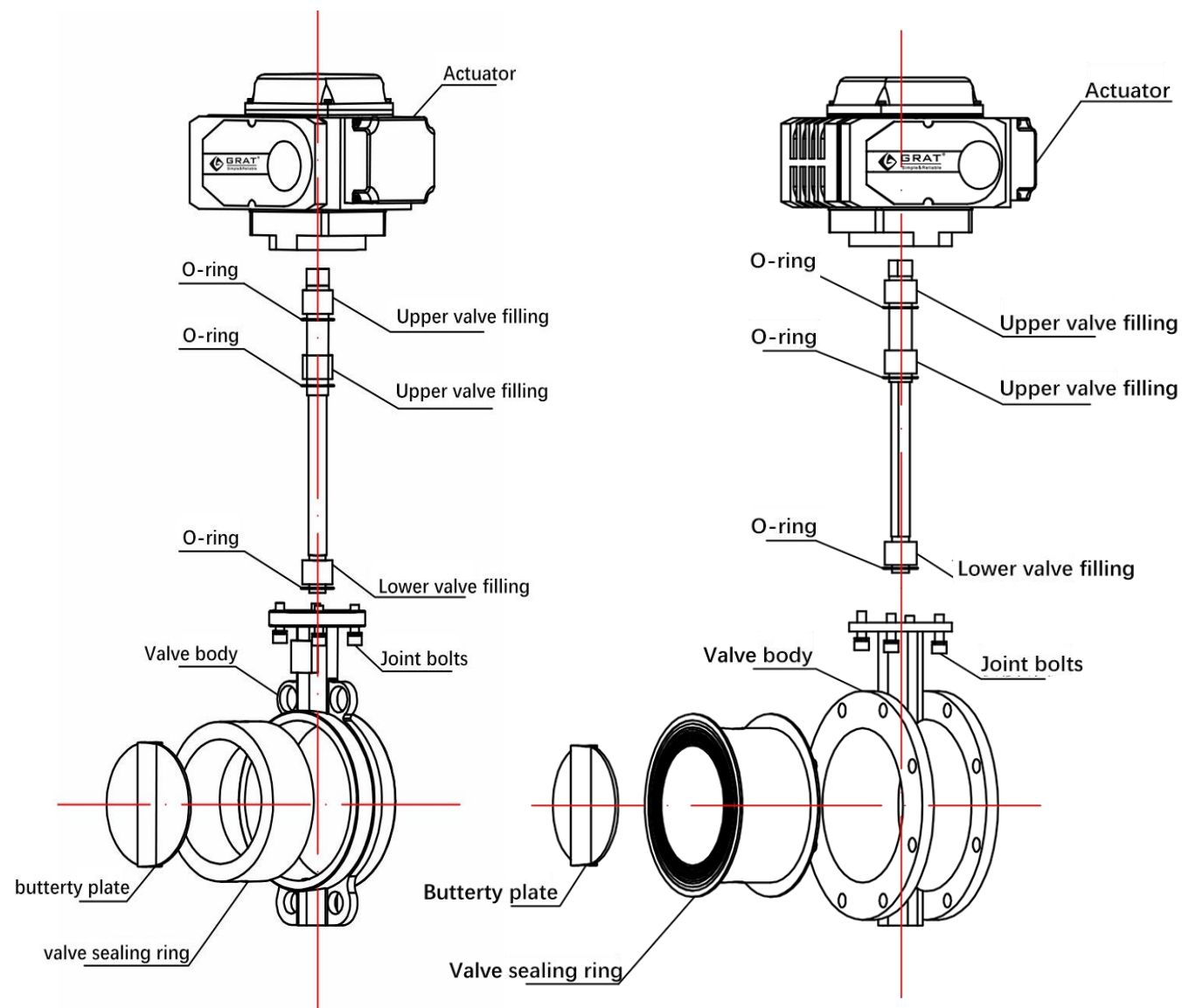
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Instruction Manual for Electric Butterfly Valve

1. Electric butterfly valve Structure Diagram



Wafer Electric Butterfly Valve

Flange Electric Butterfly Valve

4. Common Faults and Solutions for Electric Butterfly Valves

4.1 Leakage at the Sealing Surface of the Butterfly Valve

Common Faults	Solutions
Debris between the disc and sealing ring	Remove debris and clean the valve cavity
Misalignment of the disc and sealing ring in the closed position	Adjust the limit screws or actuator to ensure proper closing
Uneven or insufficient tightening of flange bolts	Ensure even tightening of flange bolts
Incorrect installation of the valve with respect to the medium flow direction	Install the valve according to the medium flow direction

4.2 Leakage at the Flange Faces of the Butterfly Valve

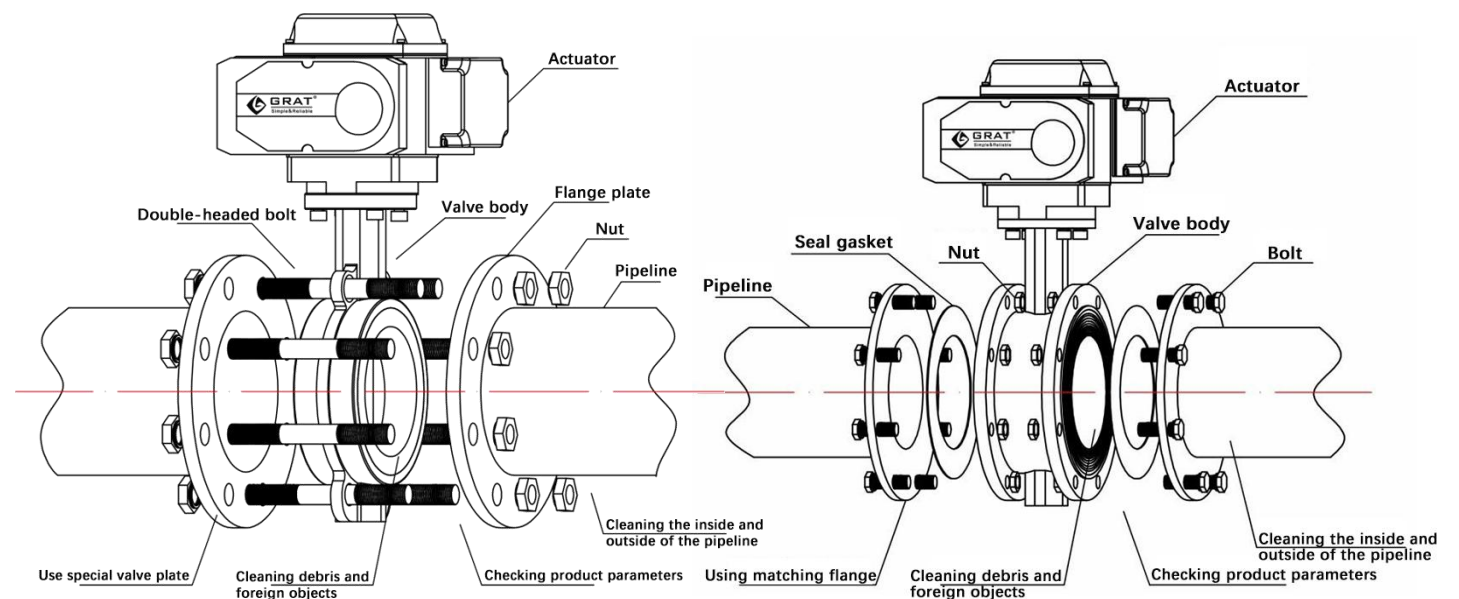
Common Faults	Solutions
Damaged sealing gaskets	Replace the sealing gaskets
Uneven or insufficient tightening of flange bolts	Tighten the flange bolts evenly



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2. Electric Butterfly Valve Installation Steps

2.1 Pre-Installation Preparation

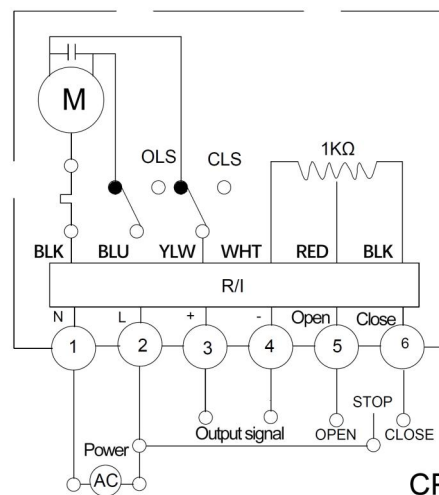


Wafer Electric Butterfly Valve

Flange Electric Butterfly Valve

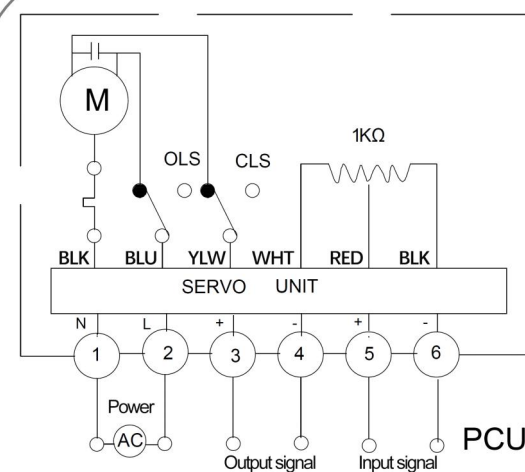
Notes:

1. Install the valve promptly after unboxing. Do not loosen any fastening screws or nuts on the valve.
2. The electric butterfly valve can be installed at any angle on the pipeline. However, for ease of maintenance, inverted installation is not recommended.
3. When installing the butterfly valve flange, ensure proper alignment between the flange surface and the sealing rubber. Tighten the bolts evenly to achieve full contact of the sealing surface. Uneven tightening may cause the rubber to protrude and jam the disc or press against it, leading to leakage at the valve stem.



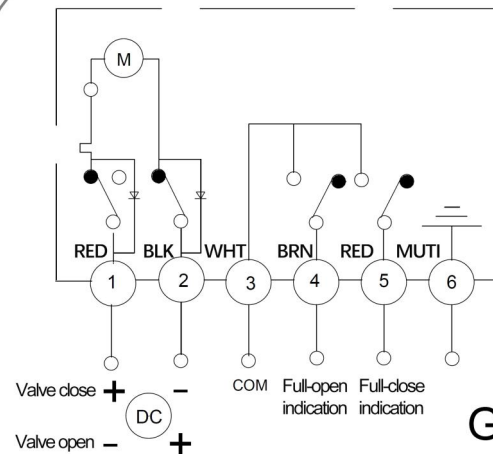
Model: CPT Type

Function: On-Off action mode, outputs 4-20mA valve position feedback signal.



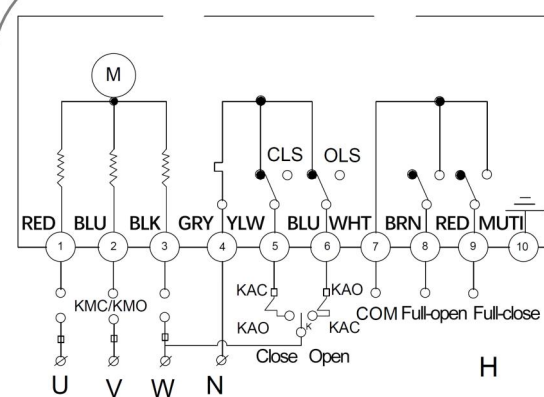
Model: PCU Type

Function: Regulates operation modes, inputs 4-20mA control signal, outputs 4-20mA valve position feedback signal.



Model: G Type

Function: External DC power supply outputs DC switch signals to control opening/closing and provides a set of passive contact signals for fully open/closed positions.

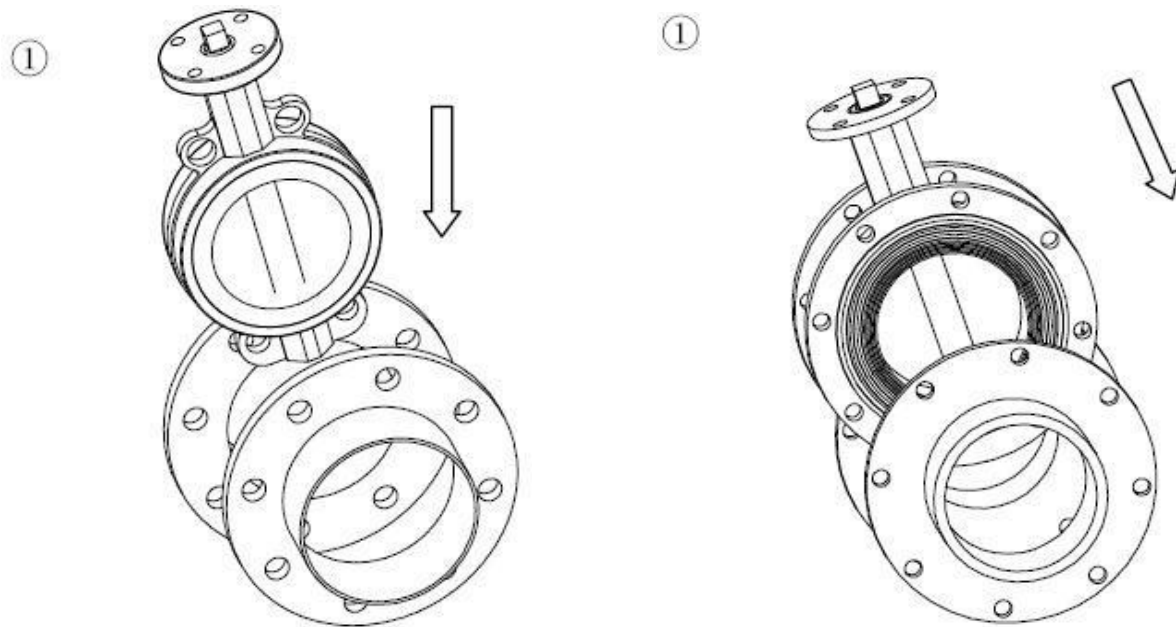


Model: H Type

Function: External three-phase power supply outputs three-phase AC switch signals to control opening/closing and provides a set of passive contact signals for fully open/closed positions.

2.2 Installation Steps

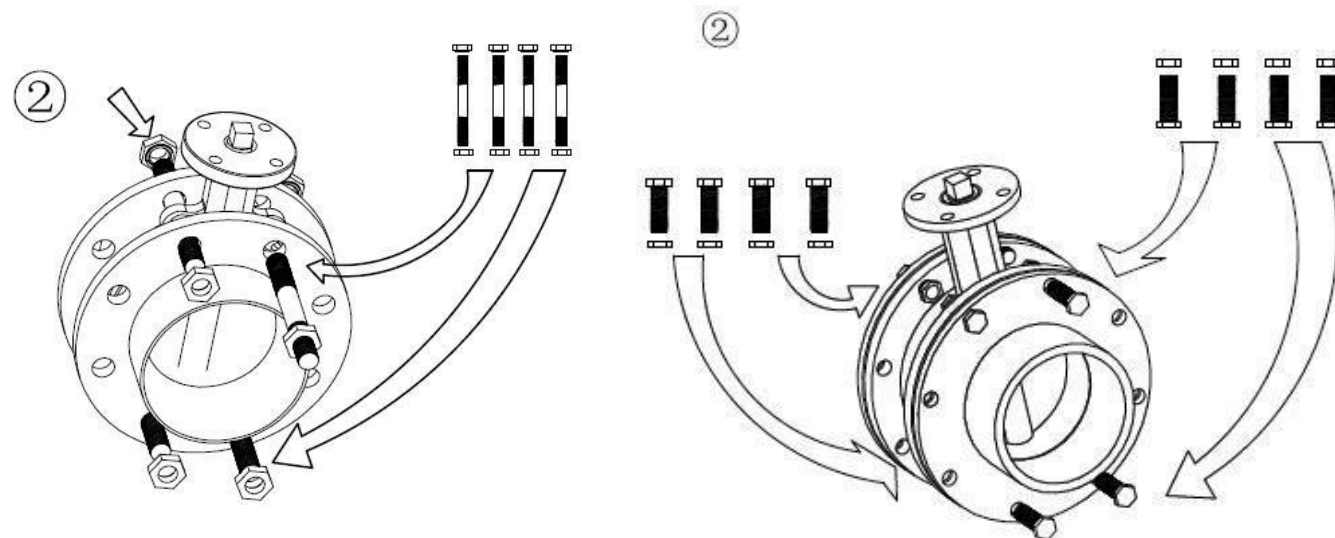
2.2.1 Place the valve between the two pre-installed flanges (for flange butterfly valves, pre-position the gaskets)



Wafer Electric Butterfly Valve

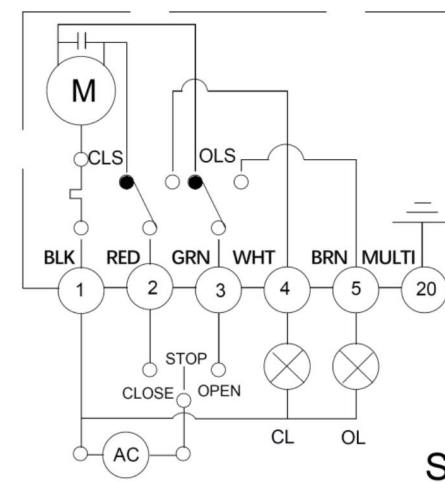
Flange Electric Butterfly Valve

2.2.2 Insert the bolts and nuts into the corresponding flange holes (for flange butterfly valves, adjust the gasket position). Lightly tighten the nuts to align the flange surfaces

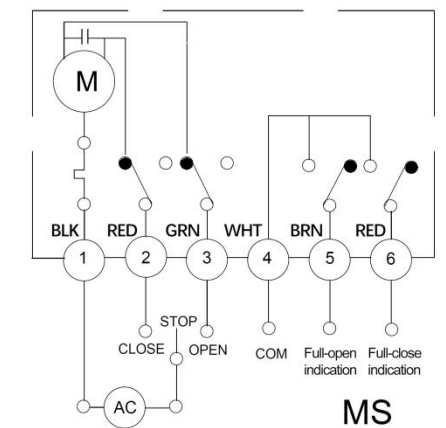


2.2.3 Fix the flanges to the pipeline using spot welding

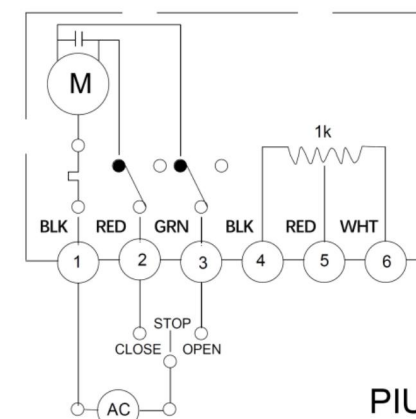
3. Wiring Diagram



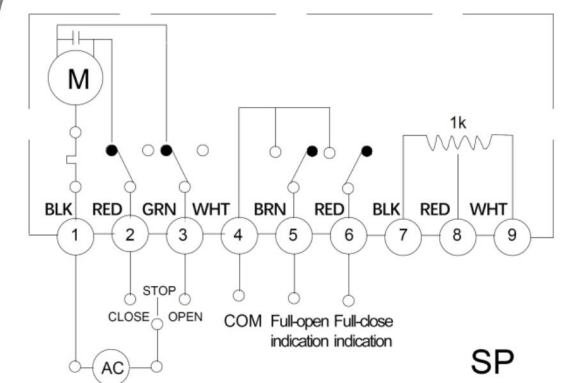
Model: S Type
Function: On-Off action mode,
no output feedback signal.



Model: MS Type
Function: On-Off action mode,
outputs passive contact signal.

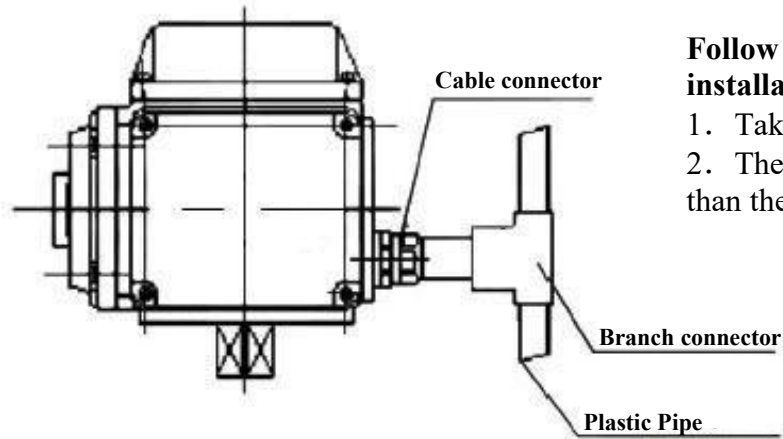


Model: PIU Type
Function: On-Off action mode, outputs
0-1KΩ feedback signal.



Model: SP Type
Function: On-Off action mode, controls
valve opening angle corresponding to
potentiometer resistance, and
simultaneously enables intermediate
position control.

2.3 Installing the Cable

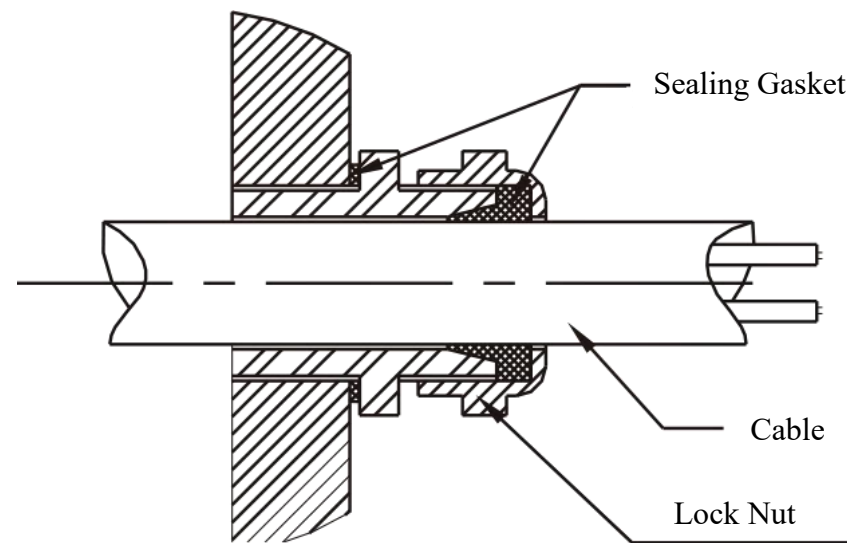


Follow the left diagram for cable installation. Pay attention to the following:

1. Take adequate waterproofing measures.
2. The machine should be positioned higher than the cable conduit.

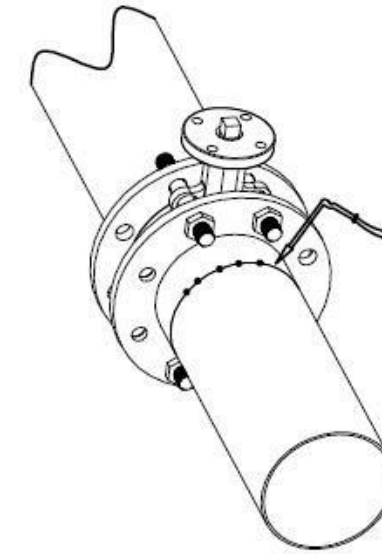
Use a cable conduit with an outer diameter of $\Phi 9$ – $\Phi 11$.

As shown in the diagram below: When installing the cable, do not use a cable conduit that does not match the diameter of the cable. Ensure the cable interface is tightly sealed to prevent rainwater from seeping into the machine and damaging internal components.



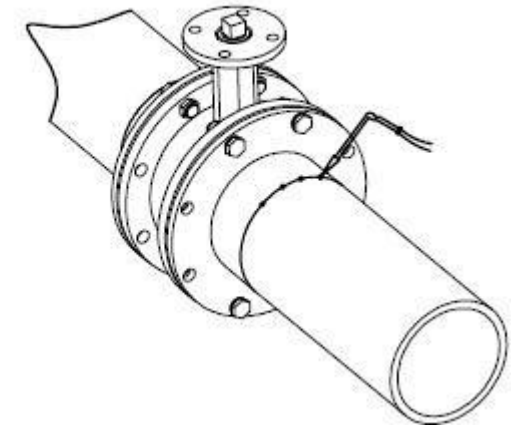
Use shielded cables for signal lines, do not run signal lines parallel to power lines.

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Wafer Electric Butterfly Valve

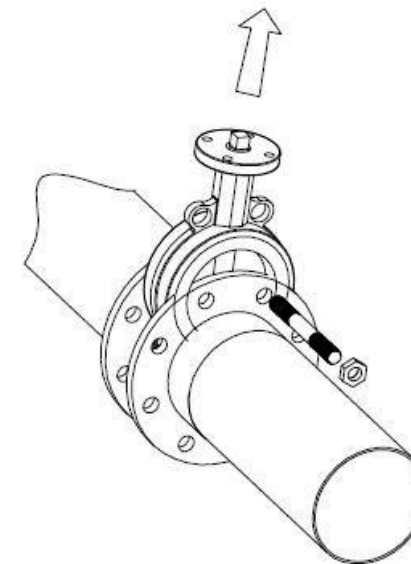
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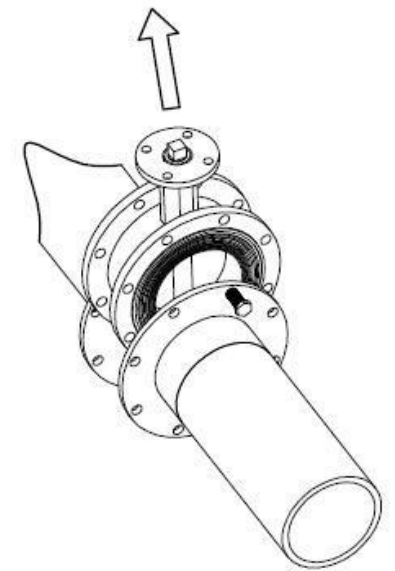
Flange Electric Butterfly Valve

2.2.4 Remove the valve

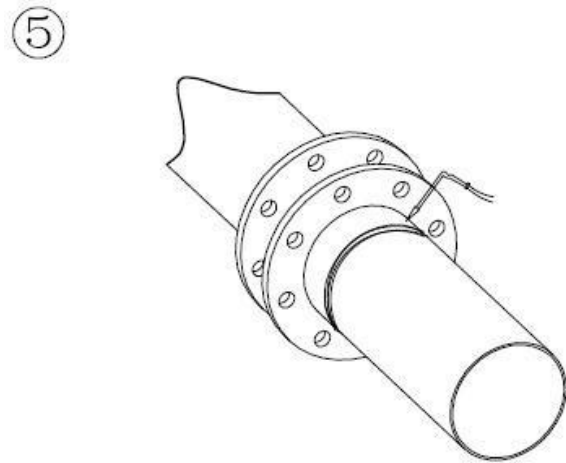
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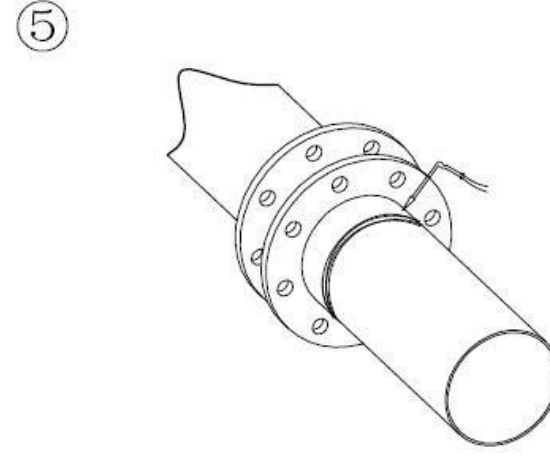
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2.2.5 Fully weld the flanges to the pipeline

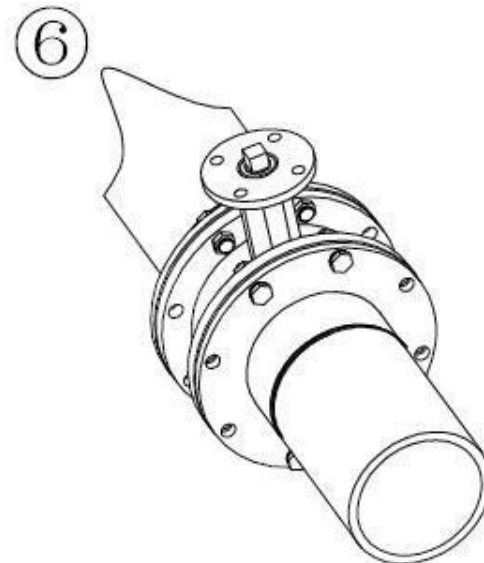
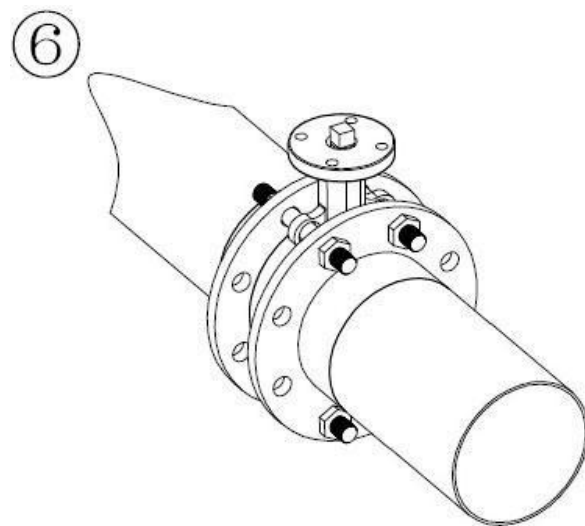


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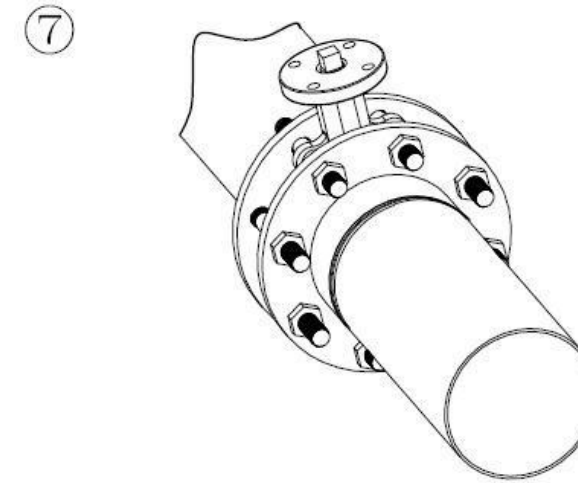


Flange Electric Butterfly Valve

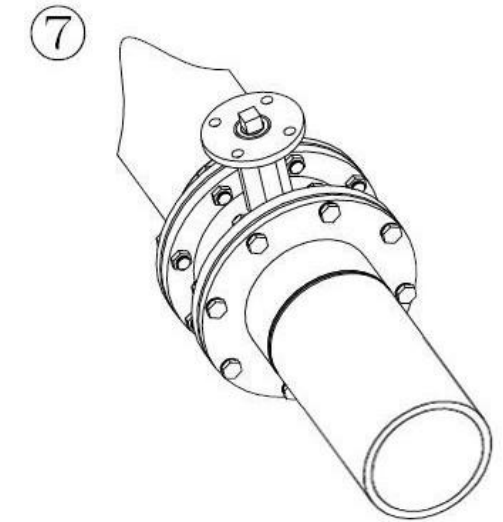
2.2.6 After the weld cools, reinstall the valve, ensuring sufficient space to prevent damage. Ensure the disc has some opening (for flange screw sealing), align the valve position, and tighten all bolts (do not overtighten). Open the valve to ensure the disc moves freely, then loosely open the disc



2.2.7 Tighten all nuts in a cross-balanced manner



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2.2.8 Confirm the valve can open and close freely, ensuring the disc does not touch the pipeline

The electric butterfly valve is factory-set with the correct opening and closing stroke for the control mechanism. To prevent incorrect direction when powering on, users should manually open the valve to the halfway (50%) position before switching on the electric switch. Then, check the switch and the indicator plate to confirm the valve opens in the correct direction