Butterfly Valve Line Up
V alves & C ontrols

Since 1984.
Since 1984 when we stepped into the field of butterfly valve, we have extended a range of supply and provided advance solutions for the stringent requirements of today’s process industry on the basis of the field experience and continuous research and development.

Unicom offers a complete application of butterfly valve to the power plant, district heating, gas and oil industry, chemical plant, and general service. If you have a pressure to be controlled by butterfly valve, then you can find a solution from Unicom.

<table>
<thead>
<tr>
<th>Application</th>
<th>Power Plant</th>
<th>District Heating</th>
<th>Gas Industry</th>
<th>Water/Sewage</th>
<th>Oil Production</th>
<th>Chemical</th>
<th>Petro Chemical</th>
<th>Refineries</th>
<th>Steel &amp; Iron</th>
<th>Plant Engineering</th>
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<tr>
<td><strong>HIGH-SEAL</strong></td>
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## Product Program

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<tr>
<th>Valve Type</th>
<th>Model</th>
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<tr>
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GTD designed for critical requirements has proven its reliability and efficiency in a wide range of application for more than 15 years.

Mechanism with an eccentric structure minimizes an on-off torque at high pressure, providing tight shut-off.

Carbon steel and stainless steel are standard materials for body and trim with a teflon seat. Other special materials or particular treatment on trim and body are available as per the application and service.
Flange Rating:
ANSI CL. 150 / CL. 300 / CL. 600
PN 10 / 16 / 25 / 40 / 64

Nominal Diameter:
DN50(*) to DN2100(*)

Temperature Range:
-40°C (-40°F) to 250°C (480°F)

Working Pressure:
Full pressure rating

Features:
- tight shut-off
- low operating torque
- compact design
- excellent control characteristic
- anti blowout shaft design
- facile maintenance

Applications:
- general & petro chemical
- oil refinery / production
- steel and iron mill
- sugar / paper / gas industry
- shipbuilding
- combined / nuclear power plant
- water / sewage
- other plant engineering

Operating:
- manual hand lever / worm gear
- pneumatic actuator
- electric actuator

Options:
- anti-static device
- manual operator locking device
- bonnet / stem extension
- internal teflon / velzona coating
- low temperature design
- material selection for anti-corrosion, high & low temperature
  : inconel, monel, titanium, CF3M, aluminum bronze, etc.
Having a combined function of GTD and MTD, the FSD gives a tight shut-off at nominal pressure and temperature rating.

FSD sealing system consists of reinforced teflon and metal seat. Although FSD has double seat structure, it requires relatively low operating torque.

FSD valve works with the metal seat when a teflon seat has been burned out. FSD provides the more reliability for steam and hot air line among its applications.
**Flange Rating:**
ANSI CL. 150 / CL. 300 / CL. 600
PN 10 / 16 / 25 / 40 / 64

**Nominal Diameter:**
DN50(2") to DN2100(84")

**Temperature Range:**
-40°C (-40°F) to 250°C (480°F)

**Working Pressure:**
Full pressure rating

**Features:**
- tight shut-off at fire
- fire safety design
- light body weight
- compact design
- anti blowout shaft design
- facile maintenance
- excellent performance in steam service

**Applications:**
- general & petro chemical
- oil refinery / production
- steel and iron mill
- shipbuilding
- combined / nuclear power plant
- other plant engineering

**Operating:**
- manual hand lever / worm gear
- pneumatic actuator
- electric actuator

**Options:**
- anti-static device
- manual operator locking device
- bonnet / stem extension
- heating jacket
- material selection for anti-corrosion, high & low temperature;
  inconel, monel, titanium, CF3M, aluminum bronze, etc.
Precious metal seated butterfly valve, MTD is applicable to high temperature as well as nominal pressure and temperature.

Eccentric sealing system assures a low operating torque and positive sealing.

Wide selection of valve materials ensures efficient performance in various industries.

All unicom butterfly valves are tested hydraulically and pneumatically in shop in order to secure perfect sealing and certified by third party at request of clients.
Flange Rating:
ANSI CL. 150 / CL. 300 / CL. 600
PN 10 / 16 / 25 / 40 / 64

Nominal Diameter:
DN50(2") to DN2100(84")

Temperature Range:
-50°C (-60° F) to 650°C (1200°F)

Working Pressure:
Full pressure rating

Features:
- inherent fire safety design
- metal to metal sealing
- low operating torque
- anti blowout shaft design
- facile maintenance
- robust design
- fitness for high temperature steam service

Applications:
- general & petro chemical
- oil refinery / production
- steel and iron mill
- shipbuilding
- combined / nuclear power plant
- other plant engineering

Operating:
- manual hand lever / worm gear
- pneumatic actuator
- electric actuator

Options:
- stellite / ENP on disc
- anti-static device
- manual operator locking device
- bonnet / stem extension
- heating jacket
- material selection for anti-corrosion, high & low temperature;
inconel, monel, titanium, CF3M, aluminum bronze, etc.
BWD series, which has two (2) metal seats, is primarily demanded by a district heating system and thermal plant where a ‘Maintenance Free’ valve is required.

Since the BWD valve is welded onto the pipeline, it is made of best grade of materials and designed for a long life and a reliable performance.

BWD, which is available for both butt weld and flange end connection, has a wide range of application from vacuum to high pressure and from low to high temperature.

Double metal seated sealing system provides inherent fire safety characteristic and efficient flow throttle capacity.
Flange Rating: ANSI CL. 150 / CL. 300
Nominal Diameter: DN200 to DN1500
Temperature Range: Up to 650°C (1200°F)
Working Pressure: Full pressure rating
Features:
- butt weld end
- tight shut-off at bi-flow direction
- double metal seated sealing
- light weight, compact design & easy installation
- robust construction
- anti blowout shaft design
- maintenance free design
Applications:
- district heating system
- gas industry
- combined thermal power plant
Operating:
- manual worm gear
- pneumatic actuator
- electric actuator
Options:
- manual operator locking device
- bonnet / stem extension
- stellite on disc with an inconel seat
- disc ENP coating
**Flange Rating:**
ANSI CL. 150 / PN 10

**Nominal Diameter:**
DN40(1.5") to DN1500(60")

**Temperature Range:**
-20°C (-4°F) to 120°C (250°F)

**Working Pressure:**
Max. 10 Bar

**Features:**
- general applications
- bi-directional positive sealing
- easy maintenance
- anti blowout shaft design
- inherent anti-corrosion
- rubber liner body seat

**Applications:**
- general & petro chemical
- oil refinery / production
- steel and iron mill
- shipbuilding
- water treatment
- sea water

**Operating:**
- manual hand lever / worm gear
- pneumatic actuator
- electric actuator

**Options:**
- teflon v-packing
- anti-static device
- stem extension
- monel / al-bronze body and disc

GRS type is an elastomer seated butterfly valve used for the process demanding positive shut-off and effective flow control.
GTS, sustainable for anti-corrosive and chemical application, consists of two split bodies and one piece of disc-stem that are fully lined with teflon.
GFB, double flanged butterfly valve, has an eccentric structure enabling smooth operation and tight shut-off at any condition.

Rubber lining is applicable to the inner body for anti-corrosion duty to prevent rust and corrosion on the body.

Basically GFB has a ring seat made of rubber, yet, as an option, it has a teflon or metal seat as per working condition.
Flange Rating:
ANSI CL. 150 / CL. 300
AWWA C504

Nominal Diameter:
DN150(6") to DN2250(90")

Temperature Range:
- Rubber Seat: Up to 120°C (250°F)
- Teflon Seat: Up to 250°C (480°F)
- Metal Seat: Up to 650°C (1200°F)

Working Pressure:
Full pressure rating

Features:
- long life
- low operating torque
- availability for various applications from water treatment to fire safe
- anti blowout shaft design
- facile maintenance

Applications:
- general & petro chemical
- refinery
- oil production (on/off shore)
- steel and iron mill
- shipbuilding
- water/sewage
- power plant
- seawater

Operating:
- manual hand lever / worm gear
- pneumatic actuator
- electric actuator

Options:
- internal rubber lining
- anti-static device
- manual operator locking device
- stem extension
- special material as per applications
Production and Quality Assurance

Factory has been modernized with facilities such as a precision machine shop, measuring and test shop, R & D section, production engineering.

Highly qualified staffs using programmed machining centers with accurate fixtures guarantee consistency with high production standards.
All materials used for manufacturing are maintained in accordance with strict quality assurance program and subjected to stringent quality surveillance. Prior to be dispatched, all products are inspected under the international standards and approved test plans. A modernized quality assurance system undertakes inspection and test, monitoring and controlling quality.
In order to pursue continuous improvement, we reserve the right to change product designs and performance specifications without prior notice.