Transportation Products
Butterfly Valves • Hopper Tees • Actuators • Accessories

A Name You’ve Trusted for Years...
400 & 480 Series
1 Piece Body Design
This economical, resilient seat valve is available in a wide variety of high quality materials including FDA approved blends and components for High Abrasion applications. Components precision machined to tight tolerances, the 400 Series delivers long service life, ease of operation and maintenance, and reduced cost.

390 & 380 Series
Split Body Design
1 Piece disc/stem inherently protects against particle entrapment and contamination, a sanitary application requirement. The 390 Series is also ideal for abrasive applications due to the thin profile disc which increases flow capacity and reduces erosion of valve components.

380/480 SERIES
Featuring Our Unique INTEGRATED NOTCH PLATE Along With ALL ULTRAFLO’S Standard Features!

Reduces Inventory Requirements
- No separate Notch Plates
- No mounting hardware
- 9 positions of control with either 5 or 10 position handles

Stronger Design
- Allows use of stronger 5 position handles for all throttling requirements
- Integrated travel stops and notches are twice as strong
Ultra Pipe Coupler

The Ultra Coupler provides easy, fast installation and is available in 4” & 5” Groove-to-Groove or Groove-to-Plain units. The coupler design is pressure tested to 65 psi.

One Person Installation

The Ultra Coupler is uniquely designed for easy installation. The Split Gasket is secured to the coupler by a Dovetail Retention and a Connecting Link keeps the body halves attached in the open position. These innovative features simplify the installation and replacement processes and result in significant savings in time and effort.

Accepts Standard Circular Gaskets

The unit can be fully opened by simply removing the captive Hinge Pin. When fully opened, the Ultra Coupler will accept industry standard circular gaskets, if desired.

Lightweight / Heavy Duty and Rugged, the coupler is made of A356-T6 aluminum with 304 stainless steel hardware for durability and excellent corrosion resistance.

Heavy-Duty Handle

Features two connection points to the body. In addition, the handle was designed with ergonomics in mind. A wide profile provides a broad base for applying both opening and closing pressure. The wide open design easily accommodates gloved hands and eliminates pinch points. Bushings at all pivot points prevent freeze up. Easy Adjustment When piping variations make coupler adjustment necessary, connecting link tension is easily field adjusted without the need for special tools.

Void-Free Gasket

To prevent contamination build up, Ultraflo’s gasket design is free of void areas when installed. The gasket ends are extended to compress together when coupler is closed, forming a positive, Leak – Free seal. All gaskets are Food Grade White Nitrile.

Resilient Seat

Ultraflo’s resilient Seat design is the heart of all 390, 380, 400 and 480 Series valves. The seats incorporate a dovetail retention system to ensure positive installation alignment and ease of assembly. All Ultraflo seats include an integral flange face seal ring molded into the seat providing a positive tank seal. Additionally, the seat completely isolates the line media from the valve body, reducing wear and increasing service life.
• 1 Piece disc/stem meets FDA requirements
• 2”-12”
• Split body construction offers quick and easy cleaning/repairs
• Lightweight, durable construction
• Seat design ensures positive retention and easy replacement
• Hand polished disc/stems
• Direct mount top plate for easy automation
• Low profile neck increases clearance

Features
Primary and Secondary Seals
Prevent line media from contacting stem and body components. The primary seal is the interference fit between the disc hub and the seat flat. The secondary seal is the interference fit between the stem and seat stem hole.

Upper and Lower Stem Bushings
(Lower Bushing only on 4” and larger valves.) Heavy duty non-corrosive thermoplastic polymer helps eliminate galling and reduce torque.

Stem Packing
Ensures a positive seal for pressure or vacuum service and prevents external contaminants from entering the stem bore.

Top Plate
Industry standardized drilling for total manual operator and actuator interchangeability.

Split Body
This split body style allows for a one-piece Ultra thin Disc/Stem that does not require disc screws, for improved sanitary performance, discs with satin and high polish finishes are available. 390 series disc/stems are offered in rugged investment cast 17-4PH and 316 Stainless Steel – or 255 Duplex Stainless when both increased strength and sanitary requirements apply.

3” 390 Series Valves
have been designed to fit between TTMA, ASME & lightweight flanges. The body features alignment holes that ensure proper valve positioning and allow quick, problem free installation.

Technical Data:
Materials of Construction
Body:
Cast Aluminum or Cast Iron Epoxy Coated
Resilient Seat:
Food Grade - Nitrile (black or white), Buna-N, or EPDM. Non Food Grade - FKM, EPDM backed PTFE
Disc/Stem:
316SS, 17-4 PH or 255 Duplex Stainless
Stem Bushing:
Upper & Lower - Thermoplastic Polymer
Body Bolt:
Cadmium Plated Steel

Bidirectional Pressure Ratings
<table>
<thead>
<tr>
<th>Disc Type</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Under Cut Disc</td>
<td>50 psi</td>
</tr>
<tr>
<td>Optional Full Cut Disc</td>
<td>150 psi</td>
</tr>
</tbody>
</table>

Photographs are not representative of all valve sizes
390 Series & 380 Series Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Split Body</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Seat</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Disc / Stem</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Upper Bushing</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Stem Packing</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Lower Bushing (4” and larger only)</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Body Bolt</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Lock Washer</td>
<td>2</td>
</tr>
</tbody>
</table>

Components

**Dimensions 390 & 380 SERIES 2” - 12” Valves**

<table>
<thead>
<tr>
<th>Valve Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>Q</th>
<th>Top Plate Drilling Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
<td>4.00</td>
<td>.375</td>
<td>.563</td>
<td>1.250</td>
<td>2.00</td>
<td>2.125</td>
<td>1.625</td>
<td>1.531</td>
<td>3.250</td>
</tr>
<tr>
<td>2 1/2</td>
<td>65</td>
<td>4.00</td>
<td>.375</td>
<td>.563</td>
<td>1.250</td>
<td>4.50</td>
<td>4.775</td>
<td>2.50</td>
<td>1.750</td>
<td>1.989</td>
</tr>
<tr>
<td>3</td>
<td>75</td>
<td>4.00</td>
<td>.375</td>
<td>.563</td>
<td>1.250</td>
<td>4.875</td>
<td>5.275</td>
<td>3.125</td>
<td>1.750</td>
<td>2.689</td>
</tr>
<tr>
<td>4</td>
<td>100</td>
<td>4.00</td>
<td>.375</td>
<td>.625</td>
<td>1.250</td>
<td>6.00</td>
<td>6.775</td>
<td>4.125</td>
<td>2.00</td>
<td>3.719</td>
</tr>
<tr>
<td>5</td>
<td>125</td>
<td>4.00</td>
<td>.375</td>
<td>.625</td>
<td>1.250</td>
<td>6.00</td>
<td>7.650</td>
<td>5.188</td>
<td>2.125</td>
<td>4.813</td>
</tr>
<tr>
<td>6</td>
<td>150</td>
<td>4.00</td>
<td>.500</td>
<td>.750</td>
<td>1.250</td>
<td>6.50</td>
<td>8.650</td>
<td>6.125</td>
<td>2.125</td>
<td>5.813</td>
</tr>
<tr>
<td>8</td>
<td>200</td>
<td>6.00</td>
<td>.625</td>
<td>.875</td>
<td>1.250</td>
<td>8.313</td>
<td>10.900</td>
<td>8.125</td>
<td>2.50</td>
<td>7.813</td>
</tr>
<tr>
<td>10</td>
<td>250</td>
<td>6.00</td>
<td>—</td>
<td>1.125</td>
<td>2.00</td>
<td>9.125</td>
<td>13.275</td>
<td>10.125</td>
<td>2.50</td>
<td>9.906</td>
</tr>
<tr>
<td>12</td>
<td>300</td>
<td>6.00</td>
<td>—</td>
<td>1.125</td>
<td>2.00</td>
<td>10.645</td>
<td>16.025</td>
<td>12.093</td>
<td>3.00</td>
<td>11.938</td>
</tr>
</tbody>
</table>

* 2 1/2” size valves are offered only in cast iron bodies and are not available in aluminum.

**Dimension & Flanging Notes**

- **H dimension** is the installed width.
- **Q dimension** is the minimum allowable inside diameter of the pipe or mating flange.

**2” - 6” Valves** are offered with **2 independent Top Plate Drilling patterns**: R/S and T/U.

**Flange Requirements:** The valve O.D. and flange bolt circle must share a common center line.

**All aluminum valves are designed to fit lightweight and ASME 125/150 flanges.**

4", 5", 6" and 8" valves require additional machining to fit TTMA flanges and require an "A" following the size indication in the part number. 2" 400 Series and all Series 3” aluminum bodied Ultraflo valves fit TTMA flanges as standard.

**390/380 Series 3” and 5” valves feature flange alignment holes to ensure proper positioning and ease of installation.**
Ultraflo's 400 Series valves have set the standard in bulk trailer applications for both performance and economy. Engineered for long service at a low price, this valve incorporates all the advantages of resilient seated butterfly valves plus the features required in bulk trailer transportation applications. The 400 Series offers rugged, lightweight construction, smooth quarter-turn operation, and ease of installation-and maintenance.

**Features**

- **Economical 1 Piece body design**
- **2”-12”**
- **Lightweight, durable construction**
- **Seat design ensures positive retention and easy replacement**
- **Low profile neck increases clearance**
- **Direct mount top plate for easy automation**

**Primary and Secondary Seals**

Prevent line media from contacting stem and body components. The primary seal is the interference fit between the disc hub and the seat flat. The secondary seal is the interference fit between the stem and seat stem hole.

**Upper and Lower Stem Bushings**

(Lower Bushing on 4” and larger valves) Heavy duty non-corrosive thermoplastic polymer helps eliminate galling and reduce torque.

**Stem Packing**

Ensures a positive seal for pressure or vacuum service and prevents external contaminants from entering the stem bore.

**Top Plate**

Industry standardized drilling for total manual operator and actuator interchangeability.

**Disc Screws**

316SS as standard and are sealed with Buna-N O-rings to prevent corrosive media from contacting the stem.
### Technical Data:

**Materials of Construction**

**Body:**
Cast Aluminum or Cast Iron Epoxy Coated

**Resilient Seat:**
Food Grade - Nitrile (black or white), Buna-N, or EPDM. Non Food Grade - FKM.

**Disc:**
316SS, Aluminum Bronze, Ductile Iron and Nylon 11 Coated Ductile Iron

**Stem:**
17-4PH Stainless

**Stem Bushing:**
Upper & Lower - Thermoplastic Polymer

**Handle:**
High strength aluminum alloy, Nodular Iron or Stainless Steel.

**Throttling Plates:**
5 Position High strength aluminum alloy
10 Position High strength aluminum alloy
10 Position Stamped Steel

### 400 Series & 480 Series Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Body</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2 Seat</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3 Disc</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>4 Stem</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>5 Upper Bushing</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>6 Stem Packing</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>7 Lower Bushing</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>8 O-Ring</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>9 Disc Screw</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

### Bidirectional Pressure Ratings

<table>
<thead>
<tr>
<th>Disc Type</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Under Cut Disc</td>
<td>50 psi</td>
</tr>
<tr>
<td>Optional Full Cut Disc</td>
<td>150 psi</td>
</tr>
</tbody>
</table>

400 Series bidirectional pressure ratings, disc in closed position.

---

**Dimension & Flanging Notes**

- **H dimension** is the installed width.
- **Q dimension** is the minimum allowable inside diameter of the pipe or mating flange.
- **2" - 6" Valves** are offered with 2 independent Top Plate Drilling patterns: R/S and T/U.
- **Flange Requirements:** The valve O.D. and flange bolt circle must share a common center line.
- All 400 Series aluminum valves are designed to fit lightweight and ASME 125/150 flanges. 4", 5", 6" and 8" valves require additional machining to fit TTMA flanges and require an “A” following the size indication in the part number. 2" 400 Series and all 3" aluminum bodied Ultraflo valves fit TTMA flanges as standard.
STANDARD TEE
• Straight and Bottom Drop units
• Rugged cast aluminum or cast steel
• Smooth, weld free flow paths
• High unloading rates with reduced flow turbulence
• Dimensionally interchangeable with industry standards
• Rigid Bottom Drop door features increased ground clearance
• All units are available with abrasion resistant Urethane lining
• Straight Tees available in 4”x4”, 5”x4”, 6” x 5” and 6”x4” sizes
• Bottom Drop Tees available in 4”x4”, 5”x4”, 6”x4”, 6” x 5” and 8”x4” sizes

DUAL FLANGED TEES
Ultraflo’s unique Dual Flanged Tees offer increased clearance and easy installation/maintenance.
• Dual flanged design allows removal of Tee while valve remains in place
• Optimum ground clearance
• Rugged cast aluminum construction
• Smooth, weld free flow paths for optimal off loading
• High unloading rates with reduced flow turbulence
• Straight and Bottom Drop Tees available in 5”x4”, 6”x4” and 6” x 5” sizes

DUAL FLANGED Bottom Drop Tee with Valve

DUAL FLANGED Straight Tee