Features:

- Available in sizes 3” thru 6”
- One handle fits sizes 3” thru 6”
- Integrated 180° notch plate eliminates mounting hardware
- Extra stem packing seals bushing and stem bore
- No fasteners required to mate the disc to the stem
- Three piece design enables use of dissimilar materials for stem and disc components
- Slim disc profile enhances flow
- One piece body eliminates body hardware
- Spherical lower bushing and pivotable lower stem eliminates plugs or retainers

Easy disassembly for replacement of wear components.
Resilient Seat
Ultraflo 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 seal.
Additionally, the seat completely isolates the line media from the valve body, reducing wear and increasing service life.

Technical Data:
Materials of Construction

Body:
Cast Aluminum

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

Disc:
316SS, Ductile Iron and Nylon 11 Coated Ductile Iron

Stems:
17-4PH Stainless

Stem Bushings:
Upper & Lower - Thermoplastic Polymer

Manual Operator Components

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

Throttling Plates:
Integrated high strength 9 position throttle plate accepts either 5 or 10 position handles.

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>
</tbody>
</table>

780 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.
3”- 6” Valves include 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 UltraSphere aluminum valves are designed to fit lightweight and ASME 125/150 flanges. 4”, 5”, and 6” valves require additional machining to fit TTMA flanges and require an “A” following the size indication in the part number. 3” aluminum bodied Ultraflo valves fit TTMA flanges as standard.

UltraSphere 780 Series Dimensions 3” Thru 6” Valves
**400 Series 1 Piece Body Design**

*A lower cost alternative for demanding applications.*

This resilient seat valve is available in a wide variety of high quality materials including Food Grade blends and components for High Abrasion applications. Components precision machined to tight tolerances, the 480 Series delivers long service life, ease of operation and maintenance.

**390 Series Split Body Design**

*For Applications requiring a sanitary design, the 1 piece disc/stem inherently protects against particle entrapment and contamination.*

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.

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**380/480 SERIES** Sizes 3” - 6” Only

*Features Our Unique INTEGRATED 90° 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
**400 & 480 Series 1 Piece Body Design**

- Economical 1 Piece body design
- 2"-12" - 400 Series, 3" - 6" - 480 Series
- Lightweight, durable construction
- Seat design ensures positive retention and easy replacement
- Low profile neck increases clearance
- Direct mount top plate for easy automation

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.

**390 & 380 Series Split Body Design**

- 1 Piece disc/stem meets sanitary requirements
- 2"-12" - 390 Series, 3" - 6" 380 Series
- Split body construction offers quick and easy cleaning/repairs
- Lightweight, durable construction
- Seat design ensures positive retention and easy replacement
- Hand polished sealing edge on disc
- Direct mount top plate for easy automation
- Low profile neck increases clearance
Series 400 & 480

**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

**Manual Operator Components**

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

**Series 400 Throttling Plates:**
5 Position: High strength aluminum alloy
10 Position: High strength aluminum alloy
10 Position: Stamped Steel

**Series 480:**
Integrated high strength 9 position throttle plate accepts either 5 or 10 position handles

**Bidirectional Pressure Ratings**

<table>
<thead>
<tr>
<th>Disc Type</th>
<th>Rating</th>
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</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 include 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.

400/480 Series 3" and 5" valves feature flange alignment ears to ensure proper positioning and ease of installation.

---

**400 Series & 480 Series Components**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Body</td>
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<tr>
<td>2</td>
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<tr>
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<td>Upper Bushing</td>
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*(4" and larger only)*

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**Dimensions 400 & 480 SERIES 2" - 12" Valves**

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<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>Q</th>
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**Top Plate Drilling Dimensions**

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<th>Holes</th>
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<td>.563</td>
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<td></td>
<td>4</td>
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</tbody>
</table>

*2 1/2" size valves are offered only in cast iron bodies and are not available in aluminum.*
Series 390 & 380

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

Manual Operator Components
Handle:
High strength aluminum alloy, Nodular Iron or Stainless Steel.
Series 390 Throttling Plates:
5 Position High strength aluminum alloy
10 Position High strength aluminum alloy
10 Position Stamped Steel
Series 380:
Integrated high strength 9 position throttle plate accepts either 5 or 10 position handles

Bidirectional Pressure Ratings
Disc Type Rating
Standard Under Cut Disc 50 psi
Optional Full Cut Disc 150 psi

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 include 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 ears to ensure proper positioning and ease of installation.

390 Series & 380 Series Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Split Body</td>
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<td>Seat</td>
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<td>Disc / Stem</td>
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<tr>
<td>4</td>
<td>Upper Bushing</td>
<td>1</td>
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<td>5</td>
<td>Stem Packing</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Lower Bushing</td>
<td>(4&quot; and larger only)</td>
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<tr>
<td>7</td>
<td>Body Bolt</td>
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<td>8</td>
<td>Lock Washer</td>
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Dimensions 390 & 380 SERIES 2" - 12" Valves

<table>
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<tr>
<th>Valve Size</th>
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<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>
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<td>In. mm</td>
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* 2 1/2" size valves are offered only in cast iron bodies and are not available in aluminum.
Ultraflo Corporation is ISO 9001:2000 certified.

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