



Transportation Valves

A Name You've Trusted for Years. . .



UltraSphere™

780 Series Butterfly Valves

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

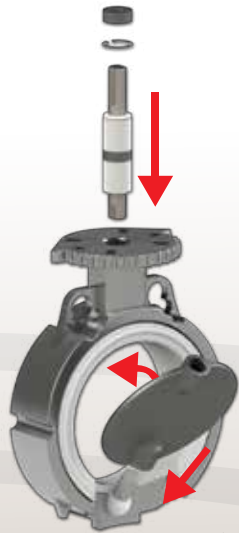


Easy disassembly for replacement of wear components.

Better Valves For The Tough Transportation Industry

UltraSphere Series Components

Item	Description	Qty.
1	Body	1
2	Seat	1
3	Disc	1
4	Stems	2
5	Upper Bushings	2
6	Stem Packings	2
7	Lower Bushing	1
8	External Retaining Ring	1
9	Bearing	1
10	Internal Retaining Ring	1



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

Disc Type	Rating
Standard Under Cut Disc	50 psi

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.

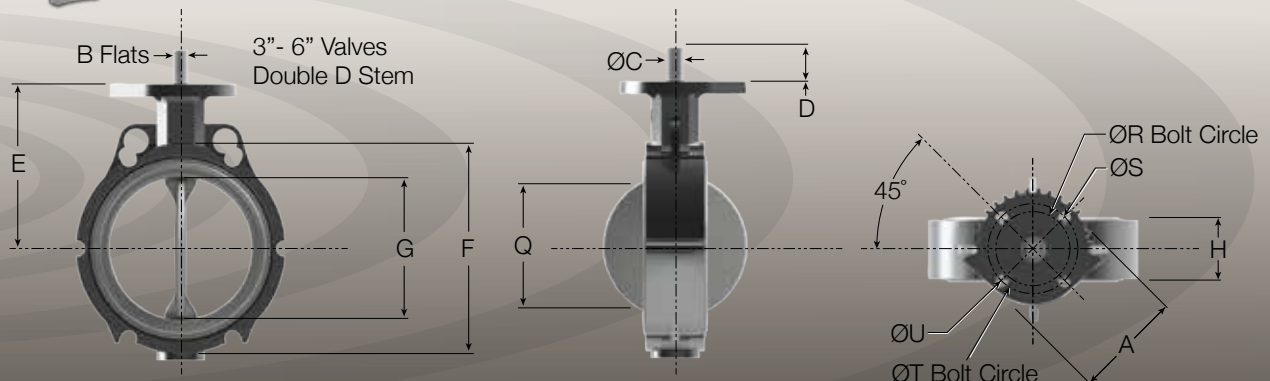
All **UltraSphere** aluminum valves are designed to fit lightweight and ASME 125/150 flanges. 4", 5", and 6" valves require additional machining to fit TTMA flanges and require an "A" following the size indication in the part number. 3" aluminum bodied Ultraflo valves fit TTMA flanges as standard.

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.



UltraSphere 780 Series Dimensions 3" Thru 6" Valves

Valve Size		A	B	C	D	E	F	G	H	Q	Top Plate Drilling Dimensions				
In.	mm										R	S	T	U	Holes
3	75	4.00	.438	.625	1.250	4.875	5.275	3.125	1.750	2.689	3.250	.438	2.760	.375	4
4	100	4.00	.438	.625	1.250	6.00	6.775	4.125	2.00	3.719	3.250	.438	2.760	.375	4
5	125	4.00	.438	.625	1.250	6.00	7.650	5.188	2.125	4.813	3.250	.438	2.760	.375	4
6	150	4.00	.438	.625	1.250	6.50	8.650	6.125	2.125	5.813	3.250	.438	2.760	.375	4



Resilient Seated Butterfly 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.



380/480 SERIES Sizes 3" - 6" Only

Features Our Unique

INTEGRATED 90° NOTCH PLATE Along With ALL ULTRAFLO'S Standard Features!

Reduces Inventory Requirements

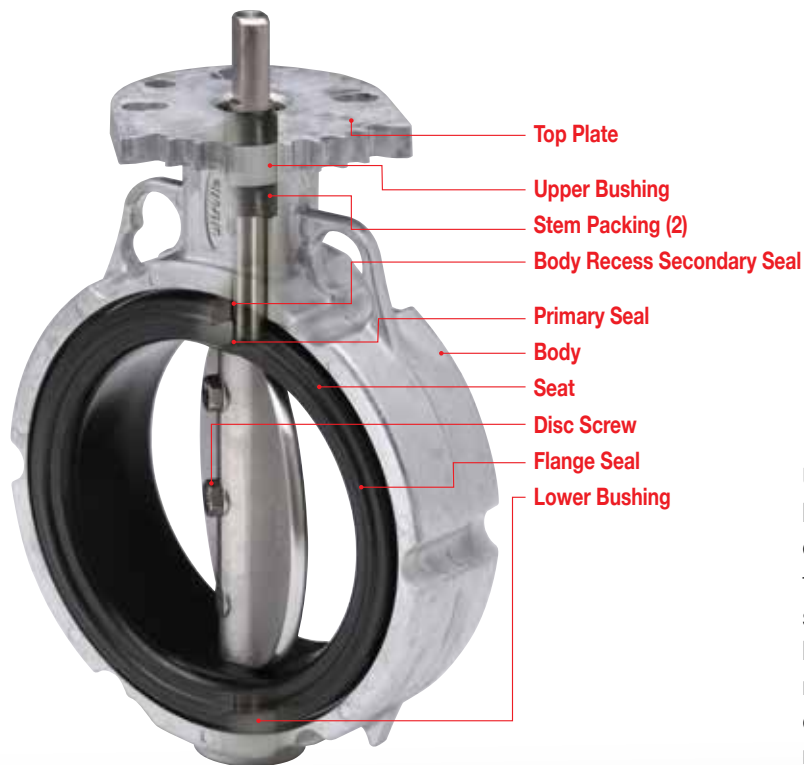
- No separate Notch Plates
- No mounting hardware
- 9 positions of control with either 5 or 10 position handles

Stronger Design

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



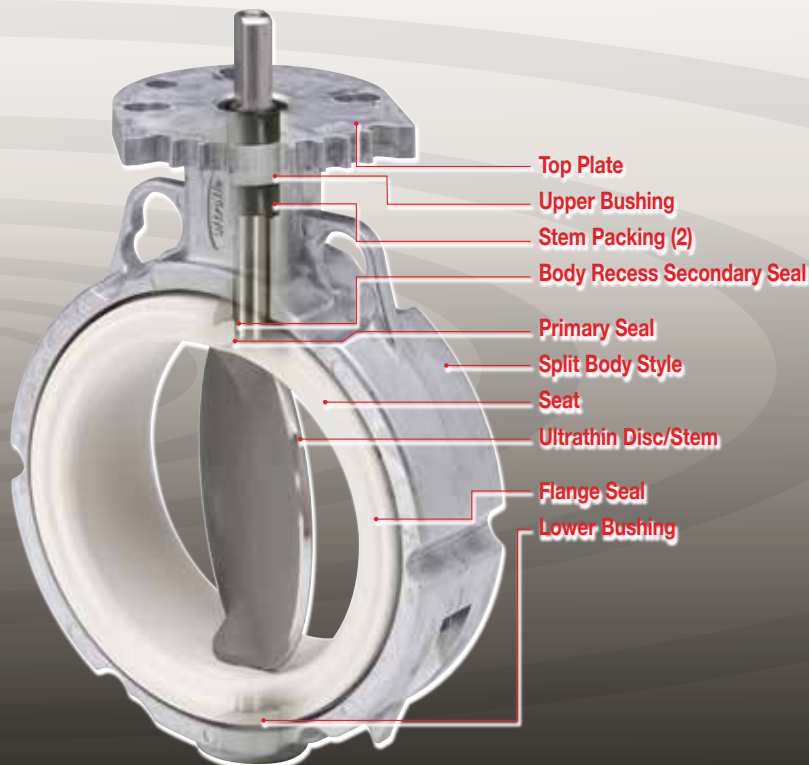
400 & 480 Series 1 Piece Body Design



- 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

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

Disc Type	Rating
Standard Under Cut Disc	50 psi
Optional Full Cut Disc	150 psi

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.

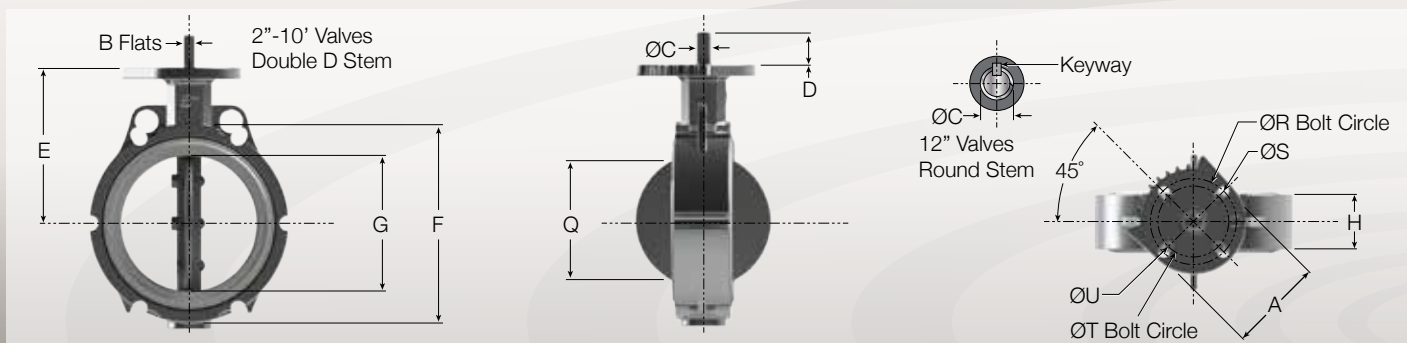
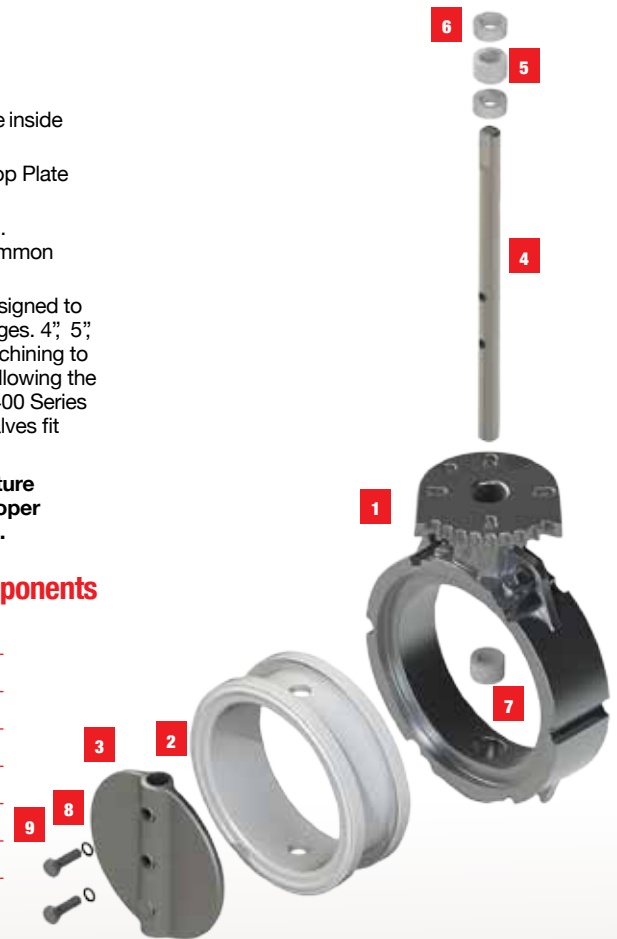
Flange Requirements: The valve O.D.
and flange bolt circle must share a common
center line.

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

Item	Description	Qty.
1	Body	1
2	Seat	1
3	Disc	1
4	Stem	1
5	Upper Bushing	1
6	Stem Packing	2
7	Lower Bushing	1
8	O-Ring	2
9	Disc Screw	2



Dimensions 400 & 480 SERIES 2" - 12" Valves

Valve Size		A	B	C	D	E	F	G	H	Q	Top Plate Drilling Dimensions				
In.	mm										R	S	T	U	Holes
2	50	4.00	.375	.563	1.250	3.938	4.025	2.125	1.625	1.531	3.250	.438	2.760	.375	4
2 1/2*	65	4.00	.375	.563	1.250	4.50	4.775	2.50	1.750	1.969	3.250	.438	2.760	.375	4
3	75	4.00	.375	.563	1.250	4.875	5.275	3.125	1.750	2.689	3.250	.438	2.760	.375	4
4	100	4.00	.438	.625	1.250	6.00	6.775	4.125	2.00	3.719	3.250	.438	2.760	.375	4
5	125	4.00	.438	.625	1.250	6.00	7.650	5.188	2.125	4.813	3.250	.438	2.760	.375	4
6	150	4.00	.438	.625	1.250	6.50	8.650	6.125	2.125	5.813	3.250	.438	2.760	.375	4
8	200	6.00	.500	.750	1.250	8.313	10.90	8.125	2.50	7.813	5.00	.563	—	—	4
10	250	6.00	.625	.875	1.250	9.125	13.275	10.125	2.50	9.906	5.00	.563	—	—	4
12	300	6.00	—	1.125	2.00	10.645	16.025	12.093	3.00	11.938	5.00	.563	—	—	4

* 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.

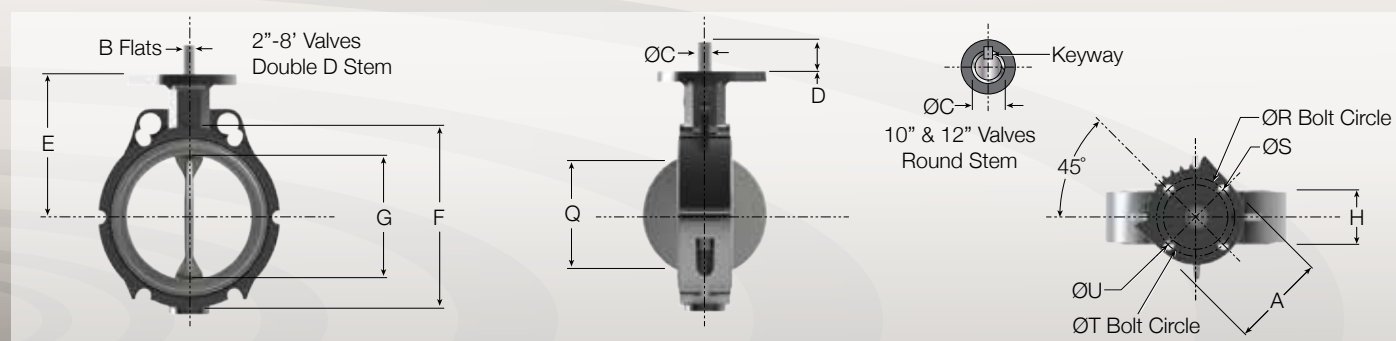
All aluminum valves are designed to fit lightweight
and ASME 125/150 flanges.

4", 5", 6" and 8" valves require additional machin-
ing to fit TTMA flanges and require an "A" follow-
ing 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

Item	Description	Qty.
1	Split Body	1
2	Seat	1
3	Disc / Stem	1
4	Upper Bushing	1
5	Stem Packing	2
6	Lower Bushing (4" and larger only)	1
7	Body Bolt	2
8	Lock Washer	2



Dimensions 390 & 380 SERIES 2" - 12" Valves

Valve Size		A	B	C	D	E	F	G	H	Q	Top Plate Drilling Dimensions				
In.	mm										R	S	T	U	Holes
2	50	4.00	.375	.563	1.250	3.938	4.025	2.125	1.625	1.531	3.250	.438	2.760	.375	4
2 1/2*	65	4.00	.375	.563	1.250	4.50	4.775	2.50	1.750	1.969	3.250	.438	2.760	.375	4
3	75	4.00	.375	.563	1.250	4.875	5.275	3.125	1.750	2.689	3.250	.438	2.760	.375	4
4	100	4.00	.438	.625	1.250	6.00	6.775	4.125	2.00	3.719	3.250	.438	2.760	.375	4
5	125	4.00	.438	.625	1.250	6.00	7.650	5.188	2.125	4.813	3.250	.438	2.760	.375	4
6	150	4.00	.500	.750	1.250	6.50	8.650	6.125	2.125	5.813	3.250	.438	2.760	.375	4
8	200	6.00	.625	.875	1.250	8.313	10.900	8.125	2.50	7.813	5.00	.563	—	—	4
10	250	6.00	—	1.125	2.00	9.125	13.275	10.125	2.50	9.906	5.00	.563	—	—	4
12	300	6.00	—	1.125	2.00	10.645	16.025	12.093	3.00	11.938	5.00	.563	—	—	4

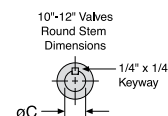
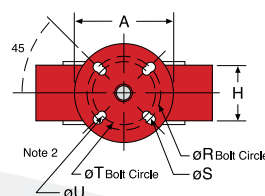
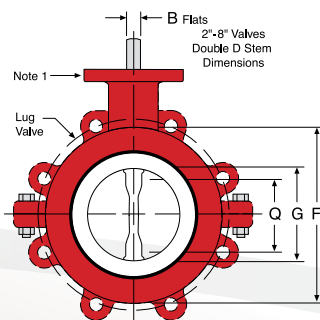
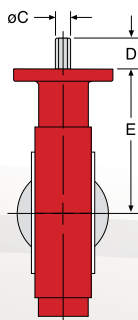
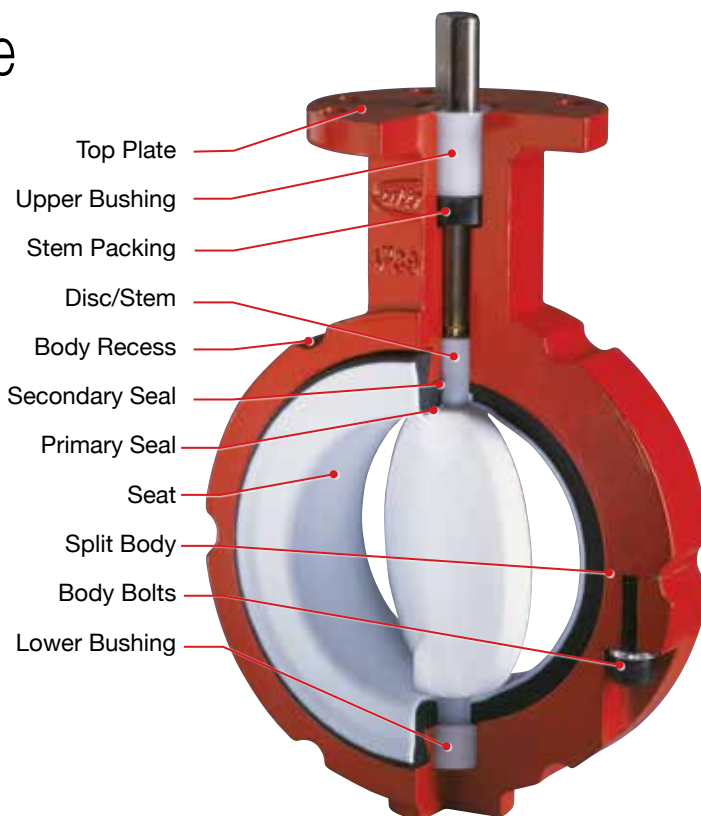
* 2 1/2" size valves are offered only in cast iron bodies and are not available in aluminum.

Series 399/392 Chemical Valve



For chemical and acid applications Ultraflo offers the series 399/392. The Series 399/392 is offered with an epoxy coated cast iron body. Our standard valve features 316 stainless steel disc/stems.

For more demanding applications a variety of disc/stem coatings and encapsulations are offered including Halar®, EPDM, Viton® or PTFE. Seat materials include EPDM, carboxylated nitrile and Buna, as well as Viton® and PTFE lined for the most harsh applications.



Dimensions 399 & 392 SERIES 2" - 12" Valves

Valve Size		A	B	C	D	E	F	G	H	Q	R	S	T	U	Lug Data	
In.	mm														BC	Tap
2	50	4.00	.375	.563	1.250	4.063	4.125	2.00	1.625	1.313	3.250	.438	2.760	.375	4.750	.625-11
3	75	4.00	.375	.563	1.250	5.00	5.375	3.00	1.750	2.563	3.250	.438	2.760	.375	6.00	.625-11
4	100	4.00	.438	.625	1.250	6.00	6.875	4.00	2.00	3.563	3.250	.438	2.760	.375	7.50	.625-11
5	125	4.00	.438	.625	1.250	6.00	7.750	5.00	2.125	4.531	3.250	.438	2.760	.375	8.50	.750-10
6	150	4.00	.500	.750	1.250	6.625	8.750	5.750	2.125	5.438	3.250	.438	2.760	.375	9.50	.750-10
8	200	6.00	.625	.875	1.250	8.313	11.00	7.750	2.50	7.438	5.00	.563	4.020	.438	11.750	.750-10
10	250	6.00	—	1.125*	2.00	9.125	13.375	9.750	2.50	9.531	5.00	.563	4.020	.438	14.250	.875-9
12	300	6.00	—	1.125*	2.00	10.645	16.125	11.750	3.00	11.50	5.00	.563	4.020	.438	17.00	.875-9

All 399/392 Series are designed to meet MSS SP67 dimensional standards.

Ultraflo Corporation is ISO 9001:2000 certified.

The data represented in this brochure is for general information only. Manufacturer is not responsible for acceptability of these products in relation to system requirements. Consult your Ultraflo representative for specific performance data and proper materials selection for your particular application.



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