

# Butterfly Valves

## 890 & 892 Series

General Service for Food and Beverage, Chemical/Petro Chemical Processing, Power and Utilities, Pulp and Paper.

Split Wafer Design

Full cut disc 150 PSI • Undercut disc 50 PSI  
PTFE or elastomer covered 100 PSI

**Body** - Lug style has drilled and tapped lugs meeting ANSI 125/150 flange standards. Two piece body allows ease of seat replacement. Lug body standard with ductile iron. Wafer body

standard with ductile iron. Also available in aluminum and stainless steel.

**Top Plate Standard ISO 5211** - Accommodates handles, gear operators, electric and pneumatic actuators.

Sizes  
**1"-12"**

**Disc/Stem** - The one-piece disc/stem is manufactured as standard in grade 255 stainless steel. Type 255 stainless has almost twice the strength of type 316 stainless steel. This eliminates shaft twisting and water hammer damage while allowing a thin disc design that increases CV ratings. Type 255 stainless provides four times the corrosion resistance as 316 stainless steel. The disc can be encapsulated with various rubber compounds and other chemically compatible materials. Undercut disc for dry powder applications are also available.

**Stem Bushing** - Composed of full strength, corrosion resistant ertalyte, stem bushings absorb operator side thrust. Top bushing comes standard in all valves, while bottom bushing comes with all valves sizes 4"-12".

**Stem-Seal** - A third seal ensuring leak resistance externally or internally for vacuum or pressure service. Matches seat materials: Buna-N, EPDM, or Viton®.

**O-Seal** - Two O-seals give a sure secondary seal as the O-seal becomes part of the body and encircles the stem before entering the seat and disc area. O-seals are also located at top and bottom of stem entry to form an absolute secondary seal. Seals are of the same material except for silicone.

**Seat** - The seat fully encapsulates the valve body, thereby preventing corrosion of the body or contamination of the flowing product. The only wetted parts are the seat and disc. Seats are available in EPDM (food grade), black nitrile (food grade), PTFE/Buna-N, PTFE/EPDM, Silicone, and Viton®.

**Hub Seal or Primary Seal** - Occurs when contact is made between the disc hub and the flat surface of the seat. Hub/seat seals prevent product from attacking stem or body.

**Flange Seal** - Sealing O-ring of resilient seat which provides an absolute seal to all flanges within specifications. No other gaskets required.

**Part Numbers:** Numbering Guide found on page 38.

**Temperature Range:** Dependent on material, see chart page 39.

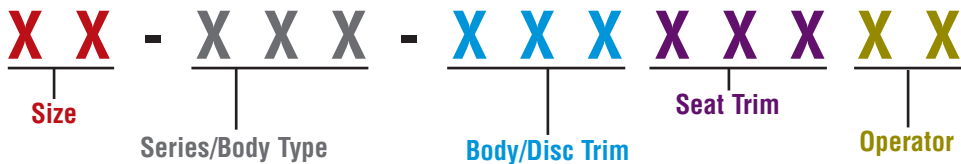
**Operator Options:** 5 and 10 position handle  
Gear operator  
Electric or Pneumatic Actuators

- Wafer (899) or Lug (892) Style Bodies
- Total Encapsulation of the Seat and Disc/Stem Provides the Ultimate in Contamination Free Service
- Four Redundant Seals
- Easy Seat and Disc Replacement
- Stem Design Prevents Blow-Out Hazard



# Butterfly Valves Numbering Guide

**500/522, 600/622, 340/342, 899/892 Series**



Series
300 - Wafer Resilient Seat - Nylon
342 - Lug Resilient Seat - Nylon
500 - Wafer Resilient Seat
522 - Lug Resilient Seat
600 - Wafer Cartridge Seat
622 - Lug Cartridge Seat
899 - Wafer Resilient Seat Split Wafer Design
892 - Lug Resilient Seat Split Wafer Design

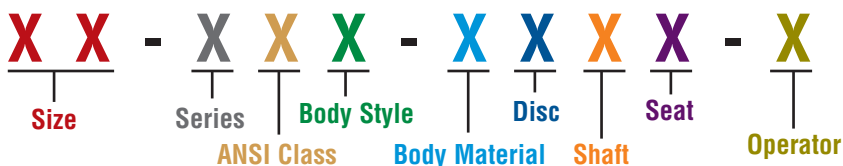
Seats Trim
See Seat Material Chart (Page 39)

Operators
H10 - 10 position Handle
H9 - SS 10 position Handle
GI - Gear Operator
LH - Lock Handle

Body & Disc Trim
<u>340/342 Series</u>
170 - Ductile Iron/Nylon 11/17-4 SS
<u>500/522 Series</u>
174 - Aluminum/Ductile Iron
175 - Aluminum/Alum-Bronze
182 - Ductile Iron/Ductile Iron
185 - Ductile Iron/Aluminum Bronze
822 - Ductile Iron/Stainless
828 - Aluminum/Stainless
<u>600/622 Series</u>
163 - (600)Cast Iron/Aluminum Bronze
169 - Cast Iron/Ductile
182 - Ductile Iron/Ductile Iron
185 - (622)Ductile Iron/Aluminum Bronze
822 - (622)Ductile Iron/Stainless
823 - (600)Cast Iron/Stainless

Body/Disc Trim
<u>899/892 Series</u>
434 - Ductile/Buna-N/255 SS
435 - SS/Buna-N/255 SS
437 - Alum/Buna-N/255SS
495 - SS/EPDM/255 SS
497 - Alum/EPDM/255SS
498 - Ductile/EPDM/255 SS
508 - Ductile/Teflon®/255 SS
544 - Ductile/Viton®/255 SS
545 - SS/Viton®/255 SS
547 - Alum/Viton®/255 SS
705 - SS/Teflon®/255 SS
755 - SS/ - /SS
712 - Ductile /4140 Steel
788 - Alum/Teflon®/255 SS
822 - Ductile Iron/no coat/Stainless
828 - Aluminum/no coat/Stainless
Add "U" for undercut disc

## High Seal Series



Series
G - GTD
F - FSD
M - MTD

ANSI Class
1 - 150
3 - 300
6 - 600

Body Style
W - Wafer
L - Lug

Body Material
C - Carbon
S - Stainless

Disc
C - Carbon
S - Stainless

Shaft
S - 316 Stainless

Seat
R - RTFE
S - 316 Stainless

Operator
H - Locklever Handle
G - Worm Gear
B - Bare Stem

## AVAILABLE SEAT MATERIALS FOR BUTTERFLY VALVES

DESC. OF TYPES	TYPES OF SEATS					
	ALL SEASON NITRILE	EPDM	VITON®	PTFE EPDM	PTFE BUNA-N	SILICONE
<b>AVAILABLE ON SERIES</b>	899 892 500 522 *600 *622 340 342	899 892 500 522 600 622 340 342	899 892 500 522	899 892	899 892	899 892 500 522
<b>COMPOUND NUMBER</b>	700	515	540	650	652	561
<b>COMMON NAMES</b>	Special formulation of nitrile for dry bulk and other abrasive services.	EPT EPR	Fluoro- elastome	PTFE	PTFE (See BUNA-N)	None
<b>COLOR</b>	Black	Black	Black	Black/white PTFE bonded to EPDM	Black/white PTFE bonded to BUNA-N	White
<b>CHEMICAL TYPE</b>	Special nitrile blend	Ethylene- propylene- diene- monomer	Poly-tetra- fluorinated hydrocarbon	Poly- fluoro- ethylene	Tetra- fluoro- ethylene	Polysiloxane
<b>TEMP RATING</b>	-40°F to 300°F	-40°F to 250°F	0°F to 350°F	-20°F to 300°F	0°F to 250°F	-50°F to 350°F
<b>GENERALLY SUITABLE FOR</b>	Used for abrasion resistance approaching that of urethane. Very resistant to extrusion at high pressures. Used in petroleum oils and water.	Less than 10% acids- inorganic and organic, alcohols, alkaline salts and solutions, dry bulk, water.	All aromatic, aliphatic and halogenated hydrocarbons.	For highly oxidizing acids (nitric, sulfuric) and alkalis.	For acids, hydrocarbons containing less than 40% aromatics.	Used primarily on high temp. applications. Usually hot air.
<b>GENERALLY NOT SUITABLE FOR</b>	Acids	Hydrocarbons	Ketones, esters or in combination with hot water and oil.	Abrasive service, or hydrocarbon service	Abrasive service	Do not use in applications over 50 PSI.

**Notes:**

1. Compound number is imprinted on O.D. Dove Trail Flat.
2. Other special compounds available on request.
3. Standard stem packing produced in compound #570.

\* Indicates Black Buna-N.

To be used only as a guide in selecting the most satisfactory combination of elastomers for resistance to various chemical solutions. It must be stressed that this information is offered only as a guide, and because of variables in actual service conditions, the accuracy of the ratings cannot be guaranteed. Actual service life can be determined only by the elastomers in actual service conditions.

This chart should be used as a GENERAL GUIDE for a particular group of compounds. It does not mean that the seat rating necessarily applies to every possible compound that could be classified in the group.