

# Manual Butterfly Valves

## 600 & 622 Series

For HVAC, Commercial, Utility and General Industrial Applications

Cartridge Seated

200 PSI (2"-12") • 150 PSI (14"-30") CWP

**Body** - Material for the wafer style (600) is of cast iron, lug style (622) of ductile iron. Optional ductile iron for wafer style. Compatible with ANSI 125/150 flanges.

Sizes  
**2"-30"**

### Top Plate Standard ISO

**5211** - Accommodates all types of actuators; handles, gear operators, electric and pneumatic actuators.

### Dead End Service Set

**Screws** - 2 places in valves up to 6" at 3 and 9 o'clock positions, 4 places in larger valves at 2, 4, 8, and 10 o'clock positions. Positioned on outer perimeter through valve body to phenolic backing.

**Precision Profile Disc** - Ductile iron provides bubble-tight shut off and assures minimum torque and longer seat life.

**Finished Disc Flats** - These mate with seat flats to give a highly efficient seal; prevents leakage into the shaft area.

**Optional Disc Material** - Aluminum bronze, 316 stainless steel.

**One-Piece Thru Shaft** - Ensures dependability and positive disc position. 416 stainless is standard.

**Precision Taper Pins** - Ensure positive, vibration proof, shaft to disc connection. Easily field replaceable. 316 stainless standard.

**Supported Shaft Seal** - Bonding of elastomer to phenolic backing ring protects against distortion, a common cause of shaft leakage.

**Teflon Bushings Standard (Three)** - Furnishes shaft support at three locations for positive shaft alignment and actuator support and less friction. Luberized bronze optional.

**Shaft Weather Seal** - Below bushing on some models.

**Standard Double D Connection** - In sizes 2" thru 8", all others round and keyed (carbon steel). Gives positive attachment for handle or actuator.

**Phenolic Backed Seat** - Non-collapsible, stretch resistant, blow-out proof, and easily field replaceable. Nitrile or EPDM standard.

**Seat Face** - Negates need for flange gaskets.

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

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

**Operator Options:** 10 position handle (2"-12")  
Manual gear operators (2"-30")  
Electric or Pneumatic actuators (pages 20-21)

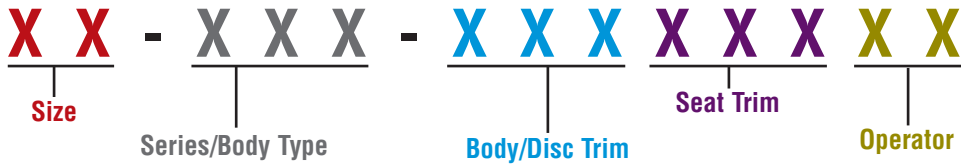
- Wafer (600) or Lug (622) Style Bodies
- Cartridge Style Seat
- Low Torque
- Extended Neck for Insulating
- One-Piece 416 SS Stem with Precision Taper Pins



800-545-3636

# 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

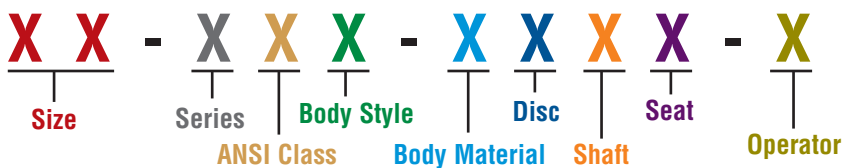
Seats Trim
See Seat Material Chart (Page 39)

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.