



Sure Seal Series **500-522**

Butterfly Valves PATENTED

Sizes 2"-12"

*Interchangeable with Keystone
Figure 100/122*

**The Superior Resilient Seated
Butterfly Valve for Industry
on the Market Today**

SURE SEAL INCORPORATED IS PROUD TO BE

ISO 9001
certified



*The Sure Seal Valve line comes with new and
improved patented designs and concepts.*

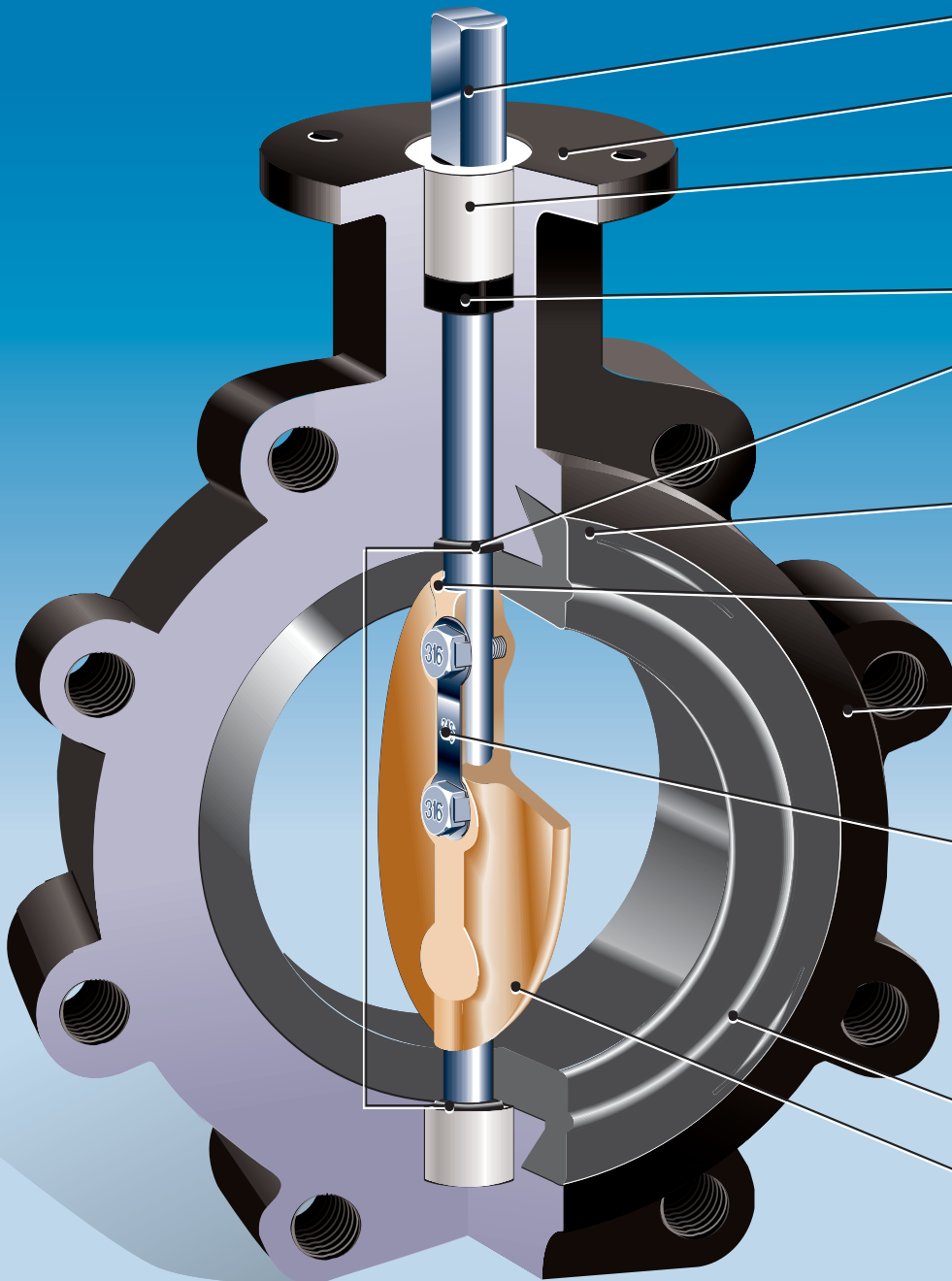
**A Lot More Valve
For A Lot Less Cost.**



Sure Seal Series 500-522

Sizes 2"-12" PATENTED

Offers New Concepts for QUALITY and SAVINGS



STANDARD FEATURES

Stem - Machined from 17-4 Stainless Steel to eliminate twisting of stem. Gives direct disc control of full or partial product flow.

Top Plate - Machined to standardized drilling pattern allowing manual handle kits, and actuation, interchangeability also available in ISO patterns.

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". To ensure trouble free valve operation.

Stem-Seal - A third seal ensuring absolute seal externally or internally for vacuum or pressure service. Available in Buna-N, EPDM, or Viton®.

O-Seal (patented) - Two Sure Seal 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. Available in Buna-N, EPDM, Viton®, or Teflon®.

Seat - EPDM, Viton®, and Sure Seal's Special Abrasion Resistant formulated blend of FDA approved Nitrile, along with 12 other standard compounds to meet your application.

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.

Body - Lug style has drilled and tapped lugs meeting ANSI 125 and 150 flange standards. Lug body standard with Ductile Iron. Wafer body standard with Cast Iron also available in Aluminum, Anodized Aluminum, Aluminum Bronze, Stainless Steel, Teflon® Coated and several Corrosion Resistant platings.

Disc Screw and (patented) Sure Lock Assembly - Sure Seal's Sure Lock Disc Screw Assembly is made of 316 Stainless Steel. Disc is machined to precision tolerance in order for Sure Lock to be recessed in face of disc, for extra locking ability. Sure Lock also holds O-Ring in proper position and eliminates costly disc screw back out and shearing of disc screws. Contains two 316 Stainless Steel disc screws. O-Rings are available in Buna-N, EPDM, or Viton®. Factory recommends that the Sure Lock be replaced anytime valve is disassembled and reassembled.

Flange Seal - Sealing O-Ring of resilient seat which provides an absolute seal to all flanges within specifications.

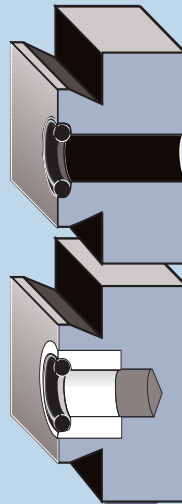
Disc - Precision machined and hand polished for positive seal with contoured edges for lower operating torque plus increased seat life. Sure Seal offers a full line of under cut discs, sizes 2"-12", making it the only manufacturer to offer this option today. Designed for maximum product flow. Available in 50 p.s.i. and 150 p.s.i. at same cost. Comes in Nodular Iron, Aluminum Bronze, 316 Stainless Steel, Monel, 25-5, 254-SMO, and also specially coated and plated discs for special applications.

Sure Seal's O-Seal is standard in all Series 500-522, 890-893, 899-892 Valves

Sure O-Seal's Patented O-Seal is machined directly into the housing on the upper body on all valves. Our 2" & 3" valves are machined in the lower body where no bushing is required. While on 4" and larger valves, the O-Seal is in the lower bushing.

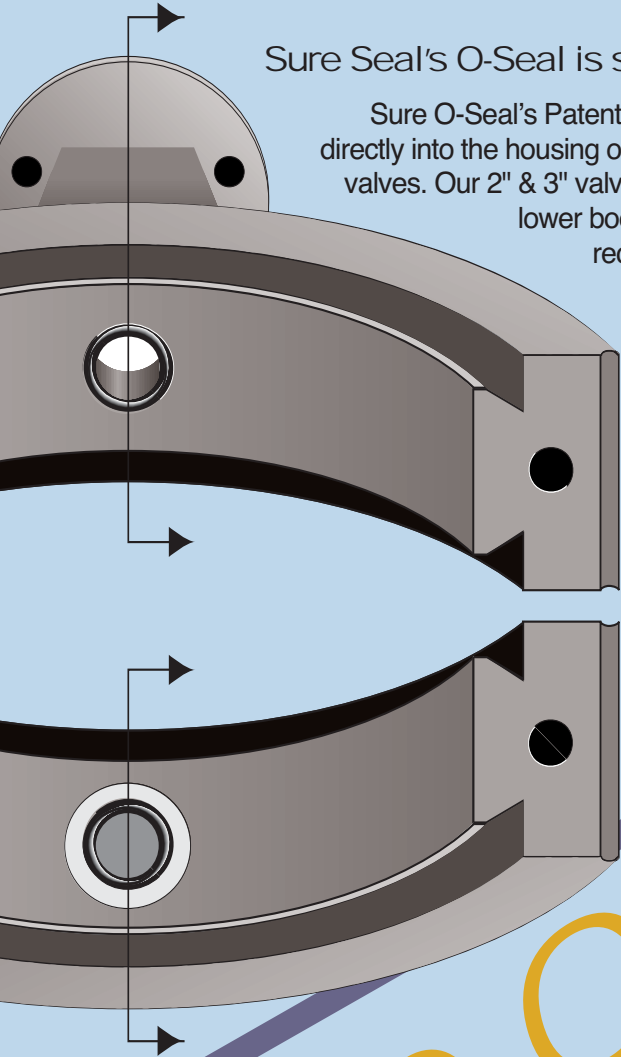
Materials: Buna-N, EPDM, Viton®. Teflon® is standard in all Teflon® Valves.

Teflon® and Viton® are register trademarks of E.I. DuPont Co.



Sure O-Seal gives 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 located at top & bottom of the stem entry, forming an absolute secondary seal.



Sure O-Seal Sure Lock

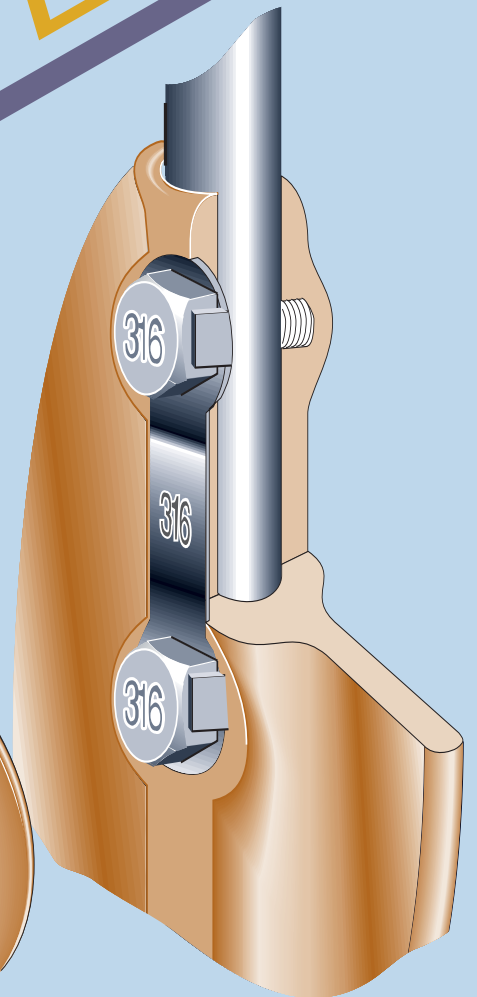
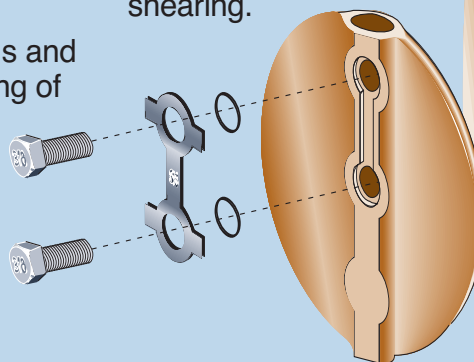
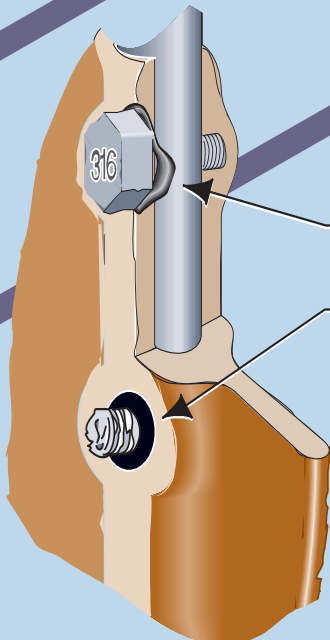
WITH SURE LOCK

Sure Seal's patented SURE LOCK disc screw assembly, made of 316 Stainless Steel, holds O-rings in proper position and eliminates disc screw backout and shearing.

WITHOUT SURE LOCK

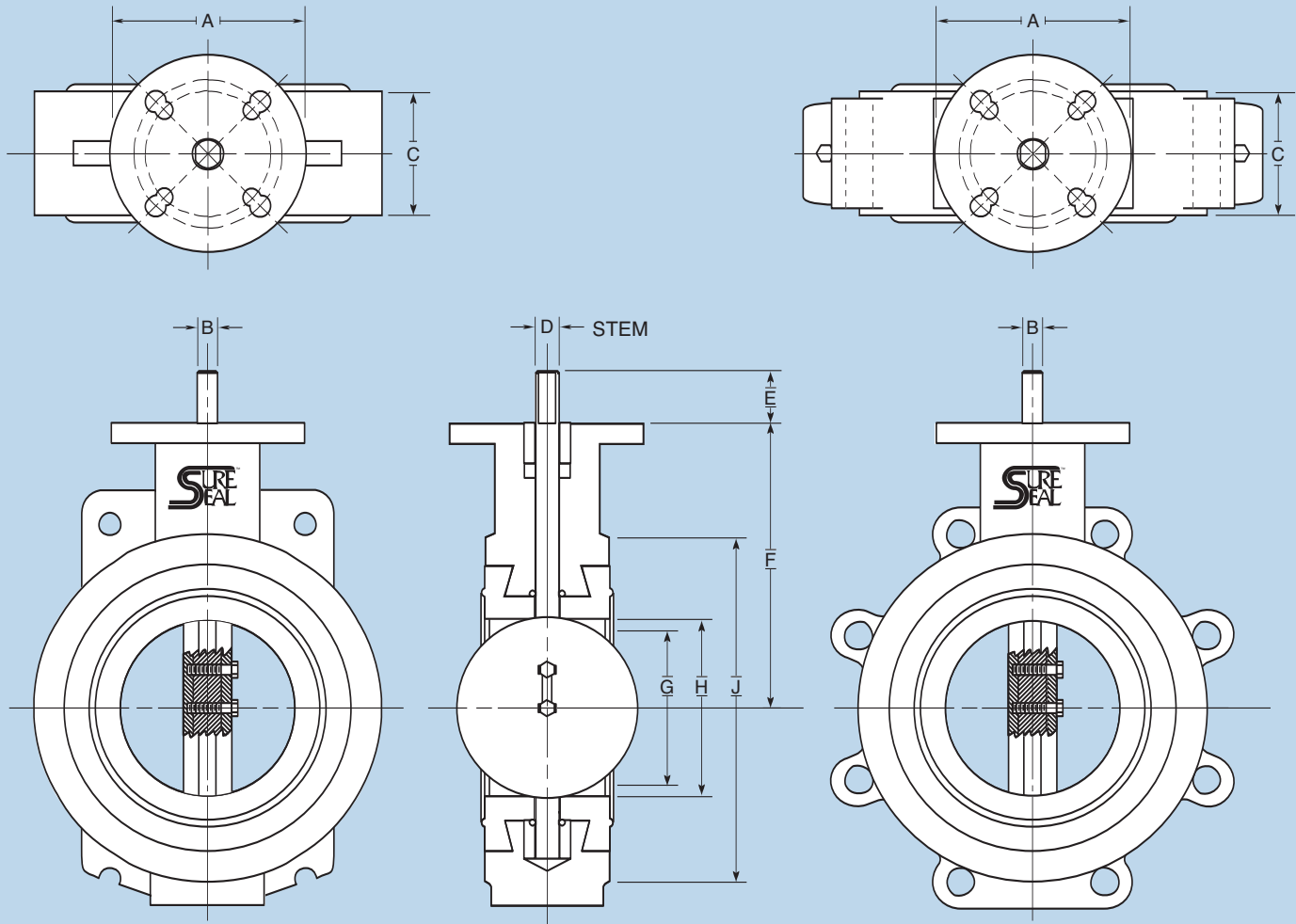
O-rings can bind and slip from position

Constant vibrations and opening and closing of valves causes screw backout and shearing



Sure Seal Series 500/522

Sure Seal Series 500/522 are dimensionally interchangeable with Keystone Fig. 100/122



Valve Size

Valve Dimension	Valve Size									
	2	2.5	3	4	5	6	8	10	12	
	4.000	4.000	4.000	4.000	4.000	4.000	6.000	6.000	6.000	
A	.375	.375	.375	.438	.438	.438	.500	.625	1.125	
B	1.625	1.750	1.750	2.000	2.125	2.125	2.500	2.500	3.000	
C	.563	.563	.563	.625	.625	.625	.750	.875	1.125	
D	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	2.000	
E	3.938	4.500	4.875	6.000	6.000	6.500	8.313	9.000	10.625	
F	1.688	2.125	2.875	3.875	5.000	6.000	8.000	10.063	11.938	
G	2.125	2.563	3.125	4.125	5.188	6.125	8.125	10.125	12.093	
H	4.025	4.825	5.250	6.750	7.625	8.625	10.812	13.375	16.188	

GENERAL NOTES:

C = INSTALLED WIDTH

G = MINIMUM ALLOWABLE INSIDE DIA. OF PIPE OR MATING FLANGE

2"-10" - D = STEM CONNECTION DIA.; B = FLATS

12" - D = STEM CONNECTION DIA.; KEYWAY = .250 X .250

* Weight based on Nodular Iron Disc, Cast Iron Body and EPDM Seat.

Top Plate Drilling

	2	2.5	3	4	5	6	8	10	12
No. Holes	4	4	4	4	4	4	4	4	4
BC	3.250	3.250	3.250	3.250	3.250	3.250	5.000	5.000	5.000
Hole Dia.	.438	.438	.438	.438	.438	.438	.563	.563	.563
ISO BC	2.760	2.760	2.760	2.760	2.760	2.760	4.020	4.020	4.020
ISO Hole Dia.	.38	.38	.38	.38	.38	.38	.41	.41	.41

Weight in Pounds*

	2	2.5	3	4	5	6	8	10	12
500	6	8	9	13	15	19	31	47	88
522	8	10	11	17	21	26	42	65	108

Lug Tapping Data

	2	2.5	3	4	5	6	8	10	12
Bolt Circle	4.750	5.500	6.000	7.500	8.500	9.500	11.750	14.250	17.000
No. Holes	4	4	4	8	8	8	8	12	12
Tap	.625-11 UNC			.750-10 UNC			.875-9 UNC		

Purchasers are expected to make their own tests to determine the suitability of these products for their particular purposes. The data represented in this flyer is for general information only. Manufacturer is not responsible for acceptability of these products in regard to individual system requirements. For specific performance data and correct materials selection, please contact your Sure Seal Dealer. ©2010 Sure Seal, Incorporated

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