

# Evans CFOS Grade 3-Piece Butterfly Valves

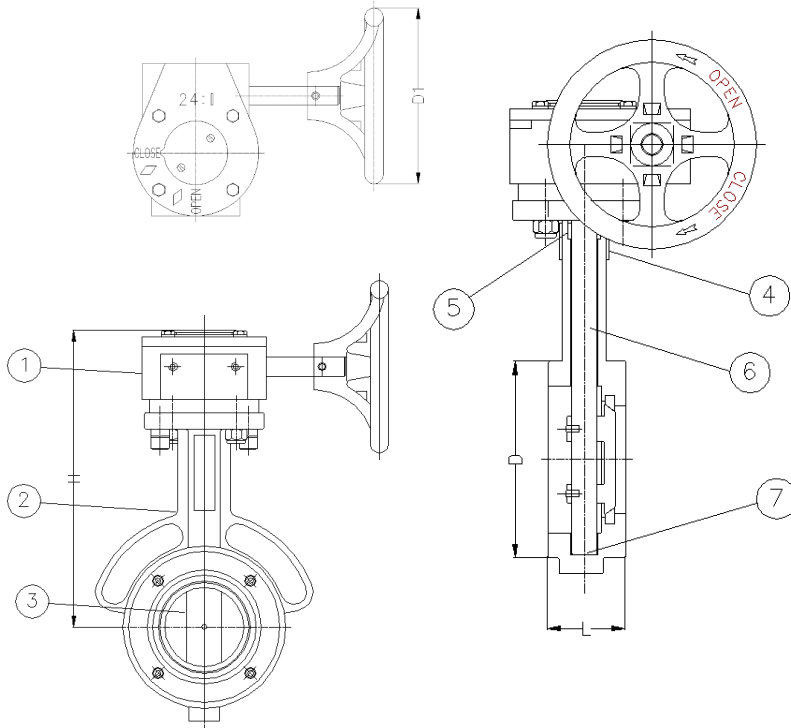


## SB Series

- 4"-26" and 200A-300A Sizes
- CFOS Cleaned and Bagged
- BA (25 RA), AP (Undefined surface finish)
- Semi-Lug with Pipe Extensions
- 100% Helium Leak Tested to  $1 \times 10^{-7}$  scc/sec
- 304L /316L Stainless Steel Tube or Pipe Extensions
- Optional Purge Ports or Purge Valves
- ANSI Class 150

# Evans Butterfly Valves

The SB series butterfly valve is designed to meet both the Solar & Semiconductor Industry's needs for a cost effective, high quality valve for CDA, GN2 and other inert gas applications. The SB Series butterfly valves are CFOS (cleaned for oxygen service) cleaned then single bagged for protection. Evans Butterfly valves eliminate unnecessary costs associated with field assembly, testing and qualification of high performance CFOS grade butterfly valves. 100% of the valves are assembled in a clean room environment and are helium leak tested to  $1 \times 10^{-7}$  scc/sec. Fully assembled valves with pipe extensions and optional purge ports speed up installation and assure you of a high quality low cost, leak free installation.



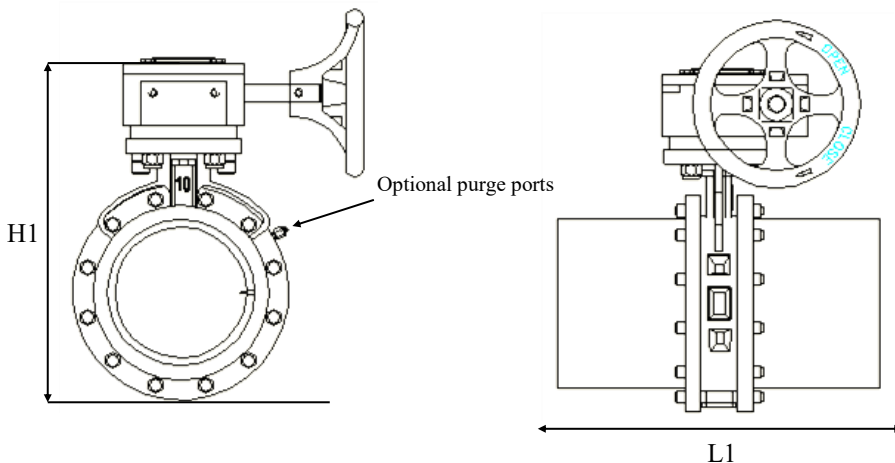
IN/mm

Size	D1	D	H	L
6"	4.92 197	7.75 215	10.74 273	2.20 56
8"	7.75 215	10.39 264	11.29 303	2.36 60
10"	11.69 297	12.99 330	14.56 370	2.67 68
12"	11.69 297	14.72 374	15.31 389	3.07 78

Larger sizes available upon request, please contact factory

Item	Description	Material
1	Gear Type	FC200
2	Body	CF8/CF8M
3	Disc	CF8/CF8M
4	Gland	CF8M
5	Packing	PTFE
6	Stem	SUS 304/SUS 316
7	Seat	PTFE
8	Taper Pin	SUS 304/SUS 316

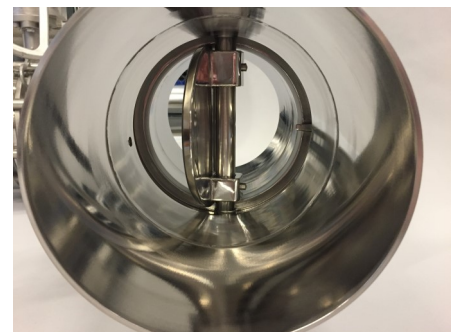
## Standard Dimensions/Configurations:



IN/mm

Size	L1	H1
6"	25.20 640.08	10.74 273
8"	25.36 644.14	11.29 303
10"	25.67 652.02	14.56 370
12"	26.07 662.18	15.31 389

Other sizes available upon request, please contact factory



\* 25 Ra / 180 Grit BA Grade Mechanical Polish Wetted Surfaces

### CV Chart (Water @ 70F, Specific Gravity = 1.00)

Size	2"	3"	4"	6"	8"	10"	12"
CV (90° Disc Orientation)	120	230	390	1230	2200	3420	4920

# Evans Butterfly Valves

## PART NUMBERING / ORDER INFORMATION

UPSTREAM      DOWNSTREAM

**SB - 128 - - STR - GG - XX - GO**

**1      2      3      4      5 6      7      8**

Above part number describes a 8" 304L stainless steel valve,  
304L SCH10 pipe extensions, no purge ports, gear operator

### 1. Series (Material) Designator

SB - 304 Stainless Steel  
SBS - 316 Stainless Steel

### 2. Valve Size (IN / JIS)

32 - 2"	128 - 8" (200A)	256 - 16" (387A)
48 - 3"	160 - 10" (250A)	288 - 18" (438A)
64 - 4"	192 - 12" (300A)	320 - 20" (500A)
96 - 6" (150A)	224 - 14" (358A)	352 - 22" (600A)
		384 - 24"
		416 - 26"

### 3. Main Size Designator - (SHC's Only)

96 - 6" (150A)  
128 - 8" (200A)  
160 - 10" (250A)  
192 - 12" (300A)

### 4. Valve Assembly Pattern Designator

STR - Straight 2-way Wafer (3-pc tube/pipe design)  
STRDE - Straight Double Eccentric (Flange design)

### 5. Inlet Connection Designator

W - 304L SS Tube Extension  
G - 304L Sch. 10 Pipe Extension  
I - 304L Sch. 10 JIS Pipe Extension  
M - 316L SS Tube Extension  
L - 316L Sch. 10 Pipe Extension  
N - 316L Sch. 10 JIS Pipe Extension  
U - ANSI 150# Flange  
Y - JIS 10K Flange

### 6. Outlet Connection Designator

W - 304L SS Tube Extension  
G - 304L Sch. 10 Pipe Extension  
I - 304L Sch. 10 JIS Pipe Extension  
M - 316L SS Tube Extension  
L - 316L Sch. 10 Pipe Extension  
N - 316L Sch. 10 JIS Pipe Extension  
U - ANSI 150# Flange  
Y - JIS 10K Flange

### 7. Purge Port Designator (Upstream/Downstream)

X - No Purge Port  
V - Purge Valve  
P - Capped Compression  
Z - Capped Male Face Seal

### 8. Options

BA - 25 Ra Mechanical Polish ID Finish  
AP - Undefined As Drawn Surface Finish  
NO - Normally Open Actuator - Spring Return  
NC - Normally Closed Actuator - Spring Return  
DA - Double Acting Actuator  
GO - Gear Operator  
LH - Lever Handle

### Stainless Steel Body Specifications (SB Series Butterfly Valve)

Design Pressure: 150 psig (10.34 bar) @ 250°F (121°C), Class 150  
Helium leak rated: 1 X 10<sup>-7</sup> scc/sec

## Standard Features:

- **Body:** One-piece investment cast wafer design. Flange top plate for direct mount actuation
- **End Cap:** 150# ANSI Flange with pipe/tube extensions, optional purge ports.
- **Seat & Seals:** Teflon, shall be field repairable.
- **Stem:** 304/316 SS, blowout proof design.
- **Disc:** Machined round and AP polished to provide bubble tight shut off, lower torque and longer seat life
- **Stem seals:** Teflon seals provide for positive sealing and leak integrity
- **Operator Type:** Gear Style (6" - up), Lever Style (2"-4")

# Evans CFOS Assemblies

## Evans Ball Valves

*Solar Grade Stainless*



### SG Series

- 1/4" - 12" and 15A-300A Sizes
- CFOS Cleaned and Bagged
- Integrated Valve Assemblies
- Spool Assemblies up to 20' (6m) Lengths
- 100% Helium Leak Tested
- Integrated Pressure Gauge for Tool Hook-up



## Evans G-Series

### Integrated Gas Sticks



## Evans Ball Valves

*High Purity Stainless*



### BA Series

- 1/4" - 12" and 15A-300A Sizes
- CFOS Cleaned and Bagged
- Integrated Valve Assemblies
- Spool Assemblies up to 20' (6m) Lengths
- 100% Helium Leak Tested



## Evans SB & DB Series

### 3-Piece Butterfly Valves



### SB Series (Stainless)

- 2"-4" Sizes
- PTFE Seat with stainless disc & stem
- Optional CFOS Cleaning and Bagging
- 3-pc. Water style with 2" (50.8mm) or Tube Extensions
- Optional Purge Ports or Purge Valve
- Helium leak tested to 1 x 10<sup>-7</sup> cc/sec
- Reduced installation cost

### DB Series (Epoxy Coated Ductile Iron)

- 2"-4" Sizes
- EPDM Seat with stainless disc & stem
- 3-pc. Full-Lug with 2" (50.8mm) Tube or Pipe Extensions
- Helium leak tested to 1 x 10<sup>-7</sup> cc/sec
- Reduced installation cost

- SB/DB Series Integrated Tee Valves or Manifolds available upon request



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