### GENERAL FEATURES

Wafer butterfly valve of which retentive elastomer liner can be replaced on site without extra tools Complete, permanent and continuous leak-tightness provided by spherical contact between the disc and the Liner and shaft sealing provided by flatly raised seat surface and polished disc-hub area.

## Leak-tightness at Line stream, shaft passages and to the at mosphere

A perfect zero leakage seal at bi-direction is obtained by the compression of the inner between the valve body and the edge of the disc. A perfect zero leakage seal is provide by means of flatted liner area around both up and down shaft passages and the spherically machined disc. Since the seat stem hole is smaller than the stem diameter, there is a compression fit forming a secondary seal. The seal insures that no fluid will leak to atmosphere.

Heavy duty top bushing absorbs side thrust load(PTFE)

Mounting plate in accordance with ISO standard

#### Sealing

Hub seal provided by preloaded contact between flatted seat surface and spherically machined and polished disc-hub area for positive sealing at all Disc positions.

#### Disc edge

Spherically machined and polished disc edge provide full concentric sealing, lower lever torques, seat life and positive shut-off closed at both directions.

### Liner

Retained resilient seat to valve enable easy replacement and isolates the body and stem from the flow. Special design of built-in O-ring provides positive flange sealing with no pipeline gasket required.

Piping guide rib

Flange bolt alignment and installation suit for multi-national standard such as JIS, DIN,ANSI and BS flange standard.

#### Body

Face to face dimension in accordance With API and ISO standard



Thru-shaft
provide high strength and absolutely
positive disc control and gives minimum
Obstruction

# **Specifications**

Standard according to ISO5752 - BS5155 - MSS SP67 - API 609

**Product range** 40mm up to 1000mm ( 1.1/2" ~ 40")

Pressure range designed for maximum working pressure of 16bar (240Psi) Flange connections The shape of valve body has been do designed as to allow flange bolt alignment onto following standards. Wafer type valve has been successfully developed to fit multi functional application onto either connection standard in the same configuration, mainly

ISO PN6, 10, 16, and 25 MSS SP 44 CL 150 ANSI B16-1 CL ANSI B16-5 CL 150 BS4504 PN6, PN10, PN16 BS10 Table D and E

AS2129 Table D and E JIS B2210 5K, 10K, 16K and 20K

Face to face dimensions in accordance with ISO 5752, MSS SP67 and API 609

**Actuator connection** valve can be fitted with any 1/4turn actuator equipped with a mounting plate meeting the standard ISO5211

**Test inspection** DK valves are guaranteed to seal perfectly (no visible leakage) in both flow directions. The test conforms to API598

**Body test:** 1.5times the maximum working pressure with water. The test is performed on the assembled valve with the disc in half open position.

**Seat and shaft seal test**: 1.1 times the maximum working pressure. The shaft seal test and inspection is conducted simultaneously with seat test.

### Standard materials

Body Cast iron ASTM A126 CI. B

Ductile iron ASTM A 536 Gr 65-45-12

Carbon steel ASTM A 216 WCB

Stainless steel ASTM A 351 Gr CF8-CF8M

Bronze ASTM B 62

Disc Ductile iron ASTM A 536 Gr 65-45-12

Stainless steel ASTM A 351 Gr CF8-CF8M
Aluminum bronze ASTM A 148 CI. C95500
Coated EPDM-Vinton-Buna etc

Stem Stainless steel ASTM A 276 304

Stainless steel ASTM A 276 410 Stainless steel ASTM A 276 316

Stainless steel 17-4PH ASTM A 564 TYPE 630

K-Model ASTM B 164

Seat Elastomer Working temperature

 EPDM
 - 40'C  $\sim$  + 150'C

 NBR
 - 20'C  $\sim$  + 90'C

 Vinton
 - 40'C  $\sim$  + 280'C

 Silicon
 - 100'C  $\sim$  + 250'C

Neoprene –  $45^{\circ}\text{C} \sim + 120^{\circ}\text{C}$ 

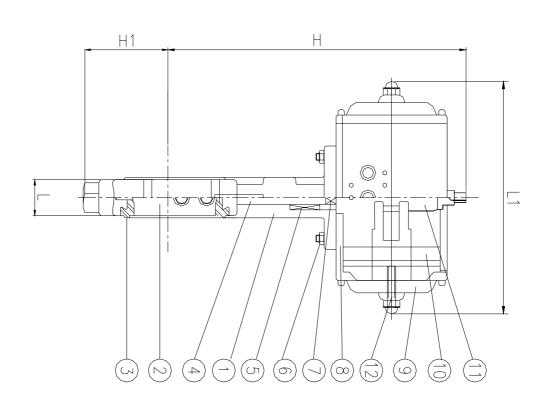
Packing EPDM

NBR Vinton

Gland PP

<sup>\*</sup> valve discs in ductile iron and carbon steel nickel plated

<sup>\*</sup> Self-locking feature, thread into the far side of the disc. and use an O-ring under the head for sealing



		_	_		
SAM	DATE		TIMIT	SCALE	
SUN	2002.09 P.S.KIM	I	mm	NS.	400
G CO.	P.S.KIM			DRAWIN.	00
NTRO				DES.	547
SAM SUNG CONTROL VALVE				CHECK. APPR.	218
					102
DRAWIN NAME.	NO.		NO.	MODEL	
PNEUMAT BUTTERF	SI		٥	Σ.	580
DRAWIN PNEUMATIC ACTUATOR NAME. BUTTERFLY VALVE	SV-990-61		-	SR-910	3/8"

400	350	300	250	200	150	125	100	80	65	50	SIZE
547	547	547	420	400	360	354	260	252	241	230	I
218	218	218	218	163	134	_ <u>`</u>	100	82	76	72	H1
102	76	76	68	64	53	53	51	44	44	41	L
580	580	450	370	370	275	275	254	175	175	175	L
3/8"	3/8"	3/8"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	PT

ı	PART			
	12	SETTING SCREW	SS41	2
	1 1	PINION	S45C	
	10	PISTON	Al. Alloy	2
	9	CYLINDER COVER	Al. Alloy	2
	∞	CYLINDER	Al. Alloy	_
	7	SOCKET	S45C	
	6	BOLT	S45C	4
	5	PACKING	VITON	5
	4	BODY SHAFT	SUS304	1
	3	SEAT	PTFE	_
	2	DISC	SUS304	_
		BODY	FC20	
	2 0	PART NAME	MATERIAL	Q,TX
	DIME	DIMENSIONS		
1			-	