

CSE Innovative Control Valve Range

CSE Width Range Products:

- Auto Control Divert Valve
- Actuator for Butterfly Valve
- Wide Range Butterfly Valve
- Sight Glass & Non-return Valve
- 3A, BS, AS, NZS, DIN, SMS, RJT, CIP, IDF...etc. Standard Union & Ferrule & Fitting
- 3A, DIN, SMS...etc. ASTM-A270 Sanitary Tube
- OEM Valve and Sanitary Ball Valve
- OEM/ODM Service



CSE Technical Service for Manual & Control Valve Unit



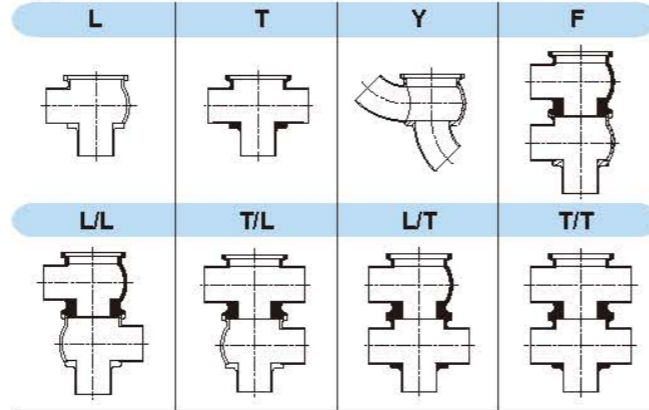
For Joint any
 Tube fitting-3A, SMS, DIN, BS,
 Elbow, Tee, Reducer
 Clamp-Union-Weld/Expanding
 Ferrule, Clamp, Valve-Butterfly,
 Check, Sight Glass, Ball Valve
 with our Orbitol weld Equipment



CSE Auto Control Divert Valve



Type: L, T, Y and L/L, T/L, L/T, T/T



SIZE	1"	1.5"	2"	2.5"	3"	4"
ØA	22.1	34.8	47.5	60.2	72.9	97.4
ØB	25.4	38.1	50.8	63.5	76.2	101.6
C	56.7	80	92.4	120	128	150.8
C1	63.5	69.9	88.9	88.9	95.3	114.3
C2	63.5	69.9	88.9	88.9	95.3	114.3
C3	81.4	—	—	—	—	—
E	50.5	50.5	64	77.5	91	119
W	50.8	57.2	76.2	76.2	82.6	98.5
W1	50.8	57.2	76.2	76.2	82.6	98.5
ØD	60	85	85	133	133	133
L	153.6	290	296.3	365.8	368.9	645.7
L1	17	25	25	32	36	38
Y	96.1	142.3	168.6	211.6	244.7	303.1
Y1	121.5	167.7	194	237	270.1	334.7
(W/W1)+SMS male	19	23	23	27	27	—
(W/W1)+IDF male	21.5	21.5	21.5	21.5	21.5	—
(W/W1)+RJT male	27	27	27	27	27	—

Opening/closing time will be effected by the following
The air supply(air pressure).

The length and dimensions of the air hose.

Number of valves connected to same air hose.

Use of single solenoid valve for serial connected air actuator functions.

Product pressure.

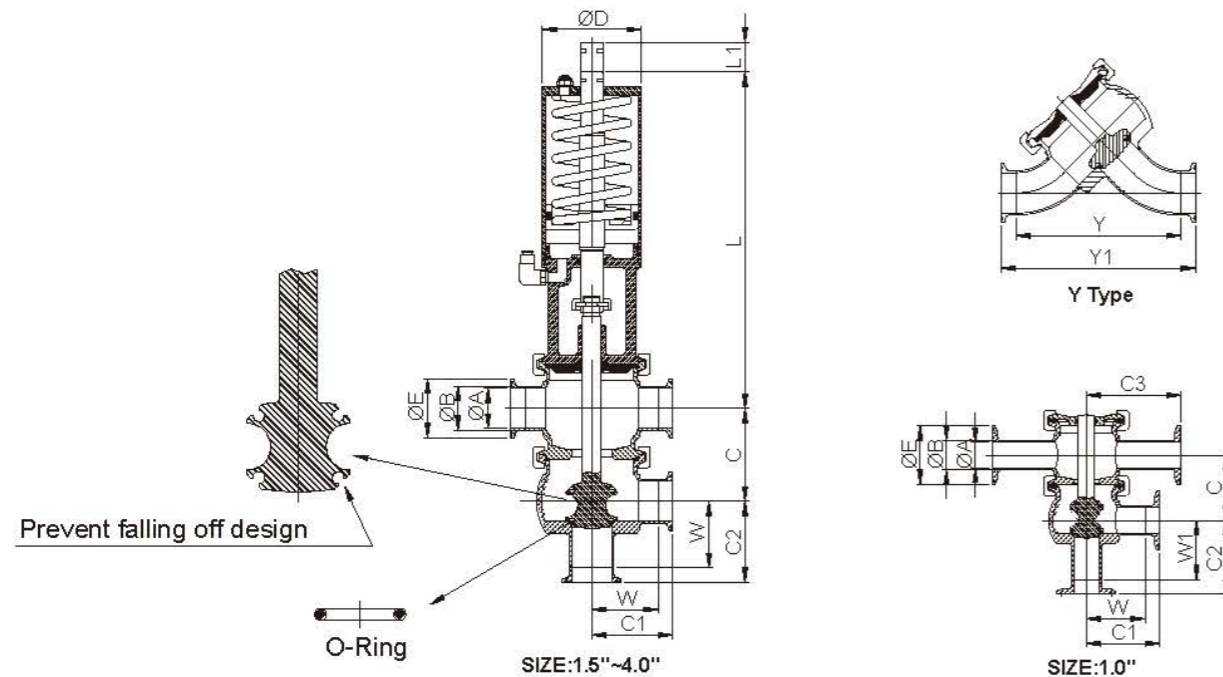
Air connections

Compressed air:

R1/8"(BSP), internal thread.

Technical data

Air pressure:----- 5 to 7 bar.



CSE Auto Control Divert Valve

(Drawing A)



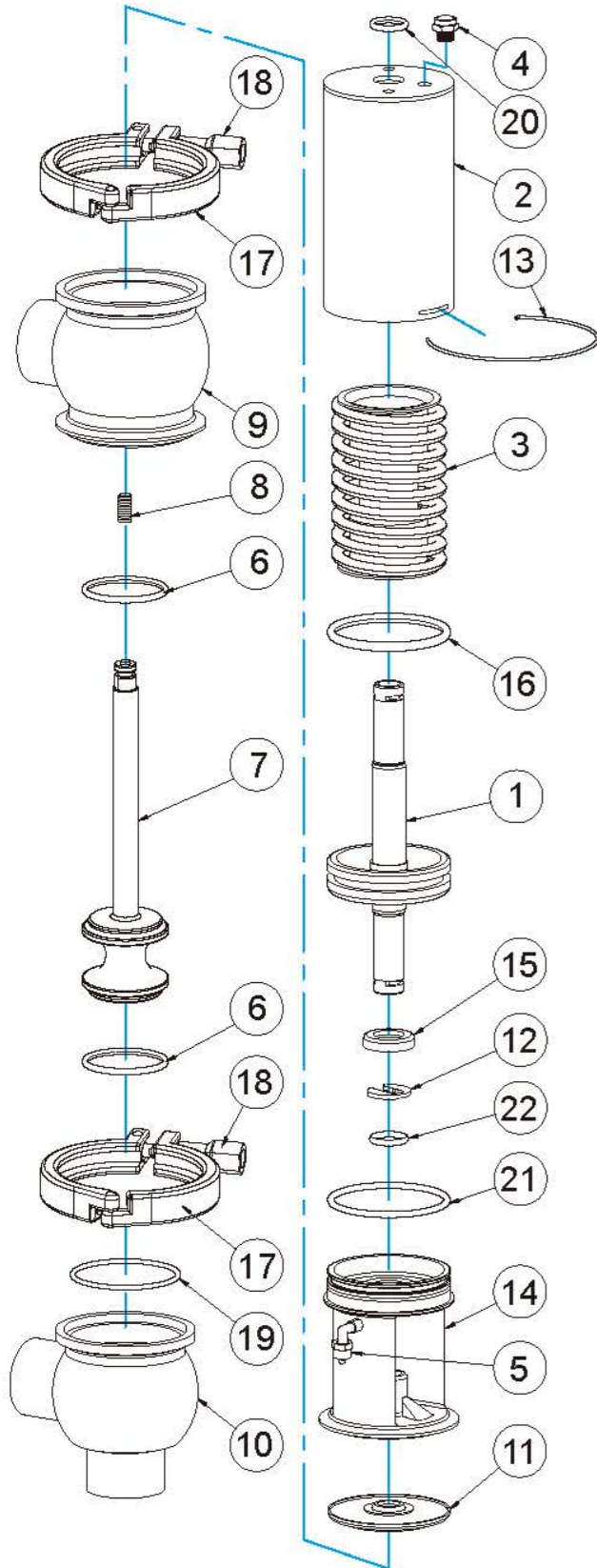
Operation Instruction

- CSE pneumatic valve can be equipped with different type of flow design,(as drawing A) to get various flow control.
- Available for SMS, DIN, IDF, RJT, 3A....., Welding; Clamp; Unions.....connect end.
- Material:
 - All parts connect with fluid are made of stainless steel AISI 316/316L(1.4401/1.4404).
 - The other parts in AISI 304 (1.4301).
 - The valve stem is sealed by a special EPDM/ Silicone/ Viton (FKM)/ PTFE seal and according to international standard for using on food or pharmaceutical.
- Operating air pressure: 5bar-8bar compressed air.
- Control ways:
 - Designed different types for controlling control various flow, as type L; T; F...etc.
 - Choose appropriate dimensions and type, as 2".....clamp or welding.
 - Choose appropriate control ways (manual or pneumatic):
 - Manual control valve to be equipped with a rapid pitch screw with protection against unscrewing.
 - Or choose air/spring(simple effect); or air/air (double effect) for pneumatic control.
 - Can use CSE automatic control box to get signal transfer and complete individual valve control.
 - Signal transfer:
 - with 10-30VDC proximity switch connection: 1 or 2pcs (PNP OR NPN)
 - Or 3A 125VAC,30VDC micro switch connection: 1 or 2pcs
 - Complete individual valve control:

Choose (a) or (b) +DC24 3.0W electric valve:1pc & air manifold (for complete control box).

CSE Auto Control Divert Valve

F type construction assembly drawing



Parts List			
Item	Parts name	Q'TY	Material
1	Piston	1	St.St 304
2	Cylinder	1	St.St 304
3	Spring assembly	1	St.St 304
4	Silencer	1	Cupler
5	Air connect	1	Cupler
6	O-Ring	2	EPDM
7	Stem-F	1	St.St 316L
8	Screws	1	St.St 304
9	Valve body-upper	1	St.St 316L
10	Valve body-lower	1	St.St 316L
11	Lip seal	1	304/EPDM
12	Clip complete	1	St.St 304
13	Lock wire clip	1	St.St 304
14	Bracket	1	St.St 304
15	Stop ring	1	PE
16	O-ring	1	NBR
17	Clamp	2	St.St 304
18	Wing nut	2	St.St 304
19	Valve body-seal ring	1	EPDM
20	O-ring	1	NBR
21	O-ring	1	NBR
22	O-ring	1	NBR



Please reference the detail
by **YouTube**

CSE Auto Control Divert Valve

Operation instruction

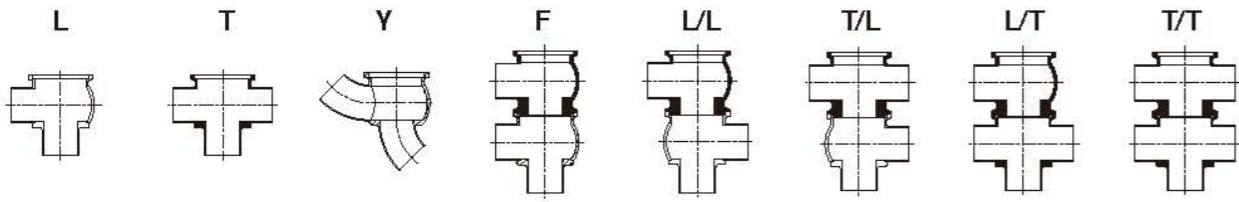
Max. flow tube pressure without leakage of valve seat.
If over table Max. pressure suggestion add proof Mix. valve

- (10) SA. Pneumatic downward movement, spring return (NO/ lower seat)
- Actuator type / function: (20) AS. Pneumatic upward movement, spring return (NC/ lower seat)
- (30) AA. Pneumatic upward and downward movement (A/A)

NO : Normal open NC : Normal close A/A : Air/Air doubt action Stop and change-over valves- Max. pressure without leakage at the valve seat ○ = Max. air input pressure is 8 bar ➔ = Tube-Line flow pressures										
Actuator/Valve body combination and direction of pressure	Spring closes	Air closes	Air closes	Spring closes	Air closes	Air closes				
Air pressure (bar)	10 (NO)	5 10	8 (NO)	5 20 (NC)	20 (NC)	5 30	8 30	5 30	8 30	
Valve size (Max. Pressure)	DN25 (1.0")	9.5	10	10	9.5	10	10	10	10	10
	DN38 (1.5")	4.5	7.0	10	4.5	7.0	9.0	10	10	10
	DN51 (2.0")	4.5	4.0	5.0	4.5	5.0	9.0	10	9.0	10
	DN63.5 (2.5")	3.0	3.0	4.0	3.0	7.0	8.0	9.0	6.0	7.0
	DN76 (3.0")	5.0	4.0	6.0	4.5	6.0	10	10	10	10

CSE Manual Divert Valve

Type: L, T, Y and L/L, T/L, L/T, T/T



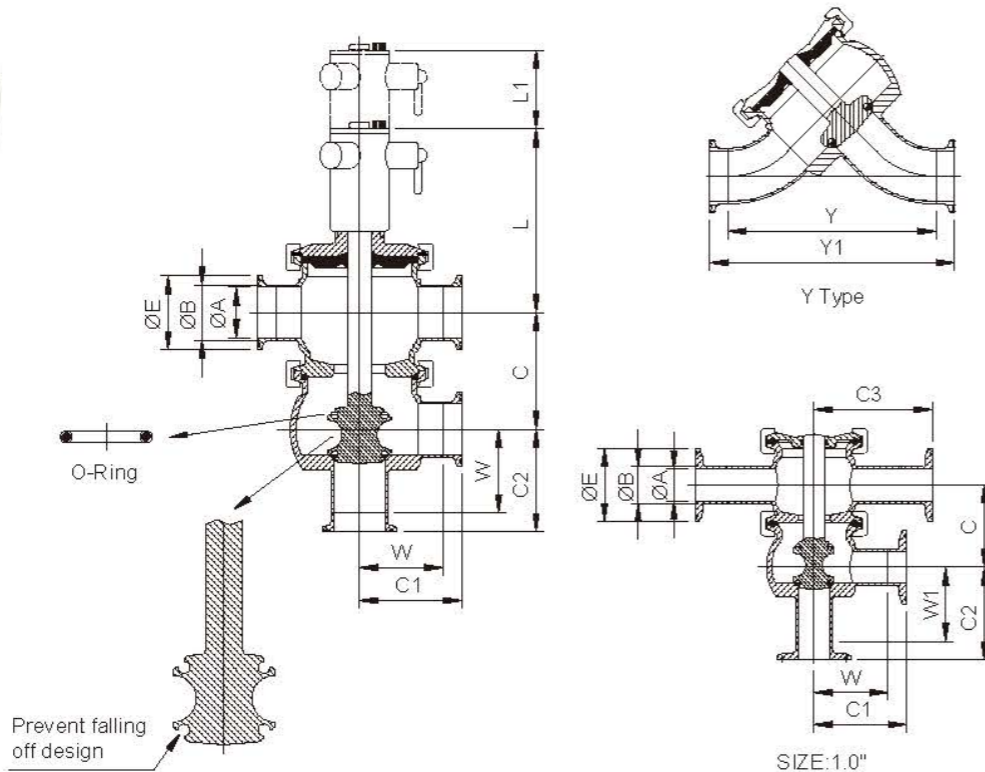
Materials:

- Flow area : AISI 316L
- Other steel parts : AISI 304
- Plug stem : AISI 316L with Chromium Plated Surface
- Gasket for Flow Area : EPDM/NBR/FKM/PTFE
- Other seals : NBR and EPDM
- OD Surface : Mirror/Satin/Sand Blaste

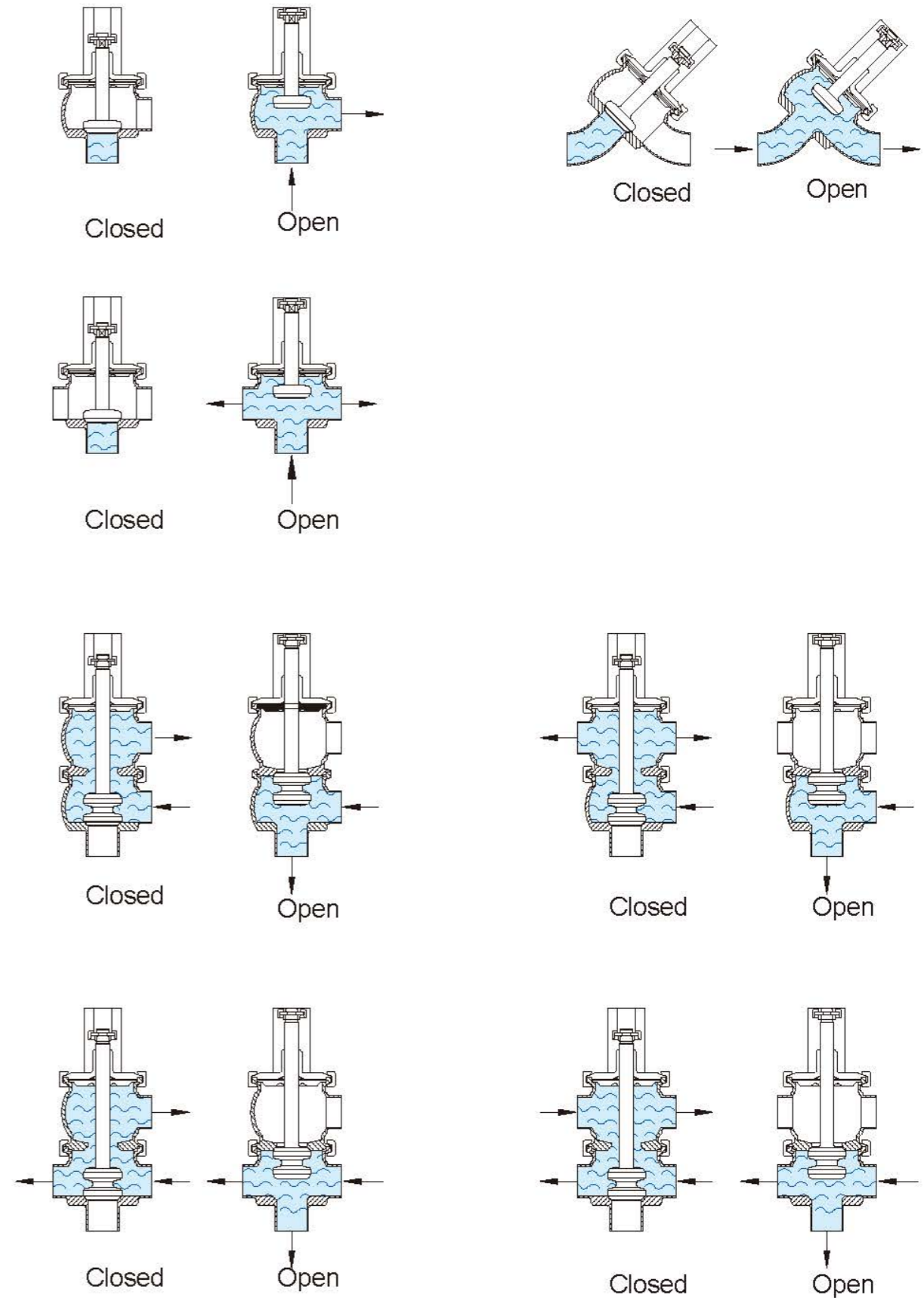
Technical data:

- Max. production pressure : 1000kpa (10bar).
- Temperature range : -10°C to +104°C (EPDM).

SIZE	1"	1.5"	2"	2.5"	3"	4"
ØA	22.1	34.8	47.5	60.2	72.9	97.4
ØB	25.4	38.1	50.8	63.5	76.2	101.6
C	56.7	80	92.4	120	128	150.8
C1	63.5	69.9	88.9	88.9	95.3	114.3
C2	63.5	69.9	88.9	88.9	95.3	114.3
C3	81.4	—	—	—	—	—
E	50.5	50.5	64	77.5	91	119
L	101	126	135	167	170	645.7
L1	17	25	25	32	36	38
W	50.8	57.2	76.2	76.2	82.6	98.5
W1	50.8	57.2	76.2	76.2	82.6	98.5
Y	96.1	142.3	168.6	211.6	244.7	303.1
Y1	121.5	167.7	194	237	270.1	334.7
(W/W1)+SMS male	19	23	23	27	27	—
(W/W1)+IDF male	21.5	21.5	21.5	21.5	21.5	—
(W/W1)+RTJ male	27	27	27	27	27	—



Configuration and Flow Direction



CSE Manual and Auto Control Tank Valve

Materials:

- Flow area: AISI 316L
- Other steel parts: AISI 304
- Plug stem: AISI 316L with chromium plated surface
- Gasket for flow area: EPDM/ FKM/ PTFE
- Other seals: NBR and EPDM
- OD Surface: Mirror/ satin /sand Blasted

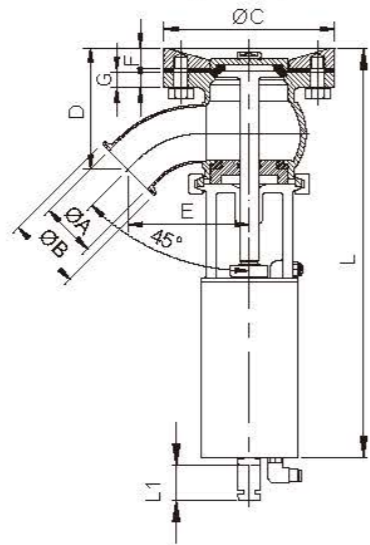
SIZE	1.0"	1.5"	2.0"	2.5"	3.0"
ØA	22.1	34.8	47.5	60.2	72.9
ØB	50.5	50.5	64	77.5	91
ØC	110	140	150	180	200
D	56.8	95.1	106.5	124.7	137.5
E	65.8	93	106	125.5	149.5
F	14	20	20	20	20
G	10	14	14	14	14
L	190	354	360	446	450
L1	22	31	31	39	39
L2	94	122	127	158	164
L3	30	35	35	45	45

Technical data:

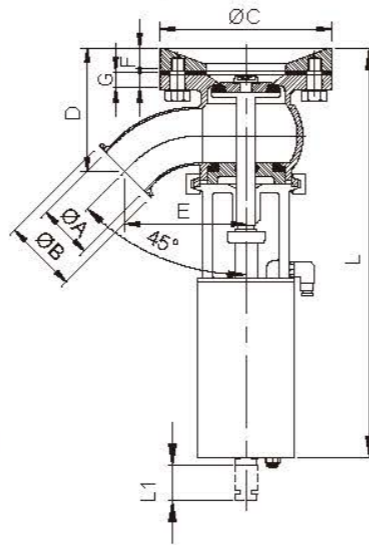
- Max. production pressure :1000kpa(10bar).
- Temperature range: -10°C to +104°C(EPDM).



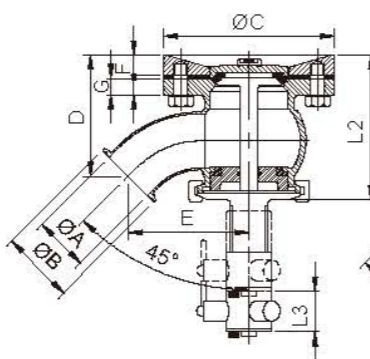
Auto : Up to open



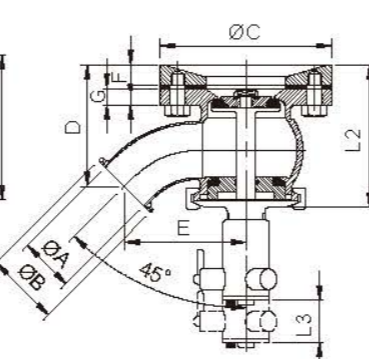
Up to close



Manual : Up to open



Up to close

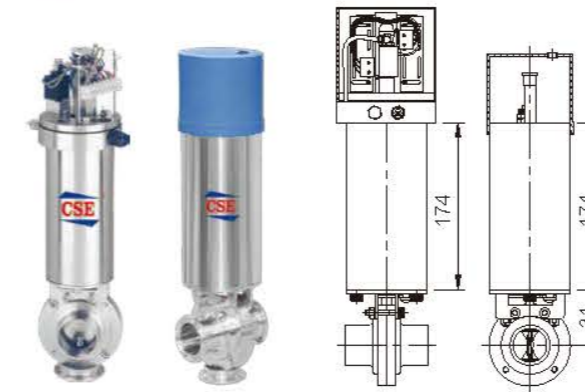


CSE Auto Control Actuator For Butterfly Valve

C2, C3 actuator instruction

- C2, C3: Shut-Off time: 1.5 second ; Weight: 3.85KGS.
C101: Shut-Off time: 1.7 second ; Weight: 4.7KGS
- Operating air pressure: 6 kg/cm₂ ; Min. 5bar ; Max. 9bar compress air
- C2, C3 Air consumption: 0.266 Liter at 5 bar ; C101 Air consumption: 0.550 Liter at 5 bar.
- Material: stainless steel AISI 304
- Can be equipped with normal close or open.

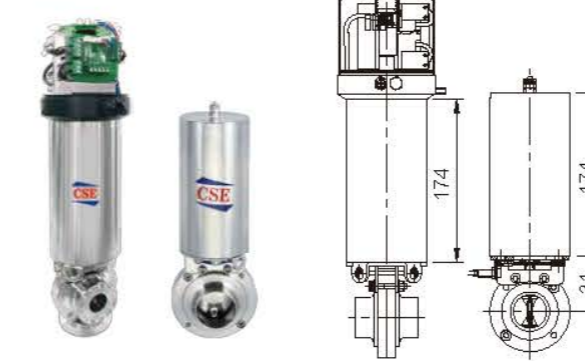
C2



Operation instruction

- C2 Actuator apply to butterfly valve in size 1"-3" of the disc head DIA. 12mm X 8mm.(other size can be required)
- Control ways:
 - Signal transfer:
 - With 10-30VDC proximity switch contact: 1 or 2pcs.
 - Or 3A 125VAC. 30VDC microswitch: 2pcs
 - Individual control: Choice (a) or (b) + DC24 3.0W electric valve: 1pc & Air manifold (for complete control box).
- Air/Air (double effect) actuator or air/spring (simple effect) actuator are available.
- Accessories: adapter: 1pcs ; M6 X 35 screw: 2pcs ; washer: 4pcs ; M6 nut: 2pcs ; 1/8PT quick coupler: 1pcs

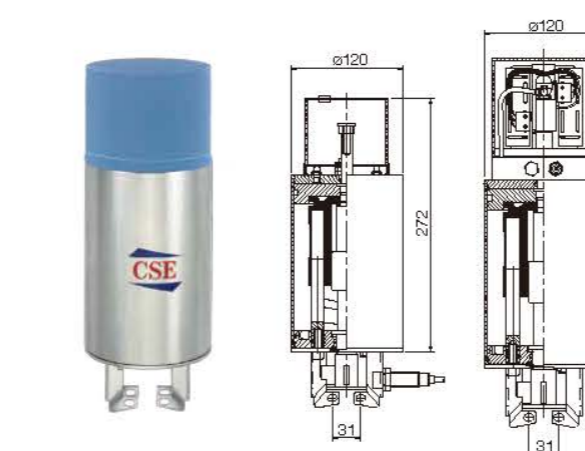
C3



Operation instruction

- C3 Actuator apply to butterfly valve in size 1"-3" of the disc head DIA. 12mm X 8mm. (other size can be required)
- Signal transfer: can be connect with M12 screw proximity switch.
- Air/Air (double effect) actuator or air/spring (simple effect) actuator are available.
- Accessories: adapter: 1pc ; M6 X 35 screw: 2pcs ; washer: 4pcs ; M6 nut: 2pcs ; 1/8PT quick coupler: 1pc

C101



Operation instruction

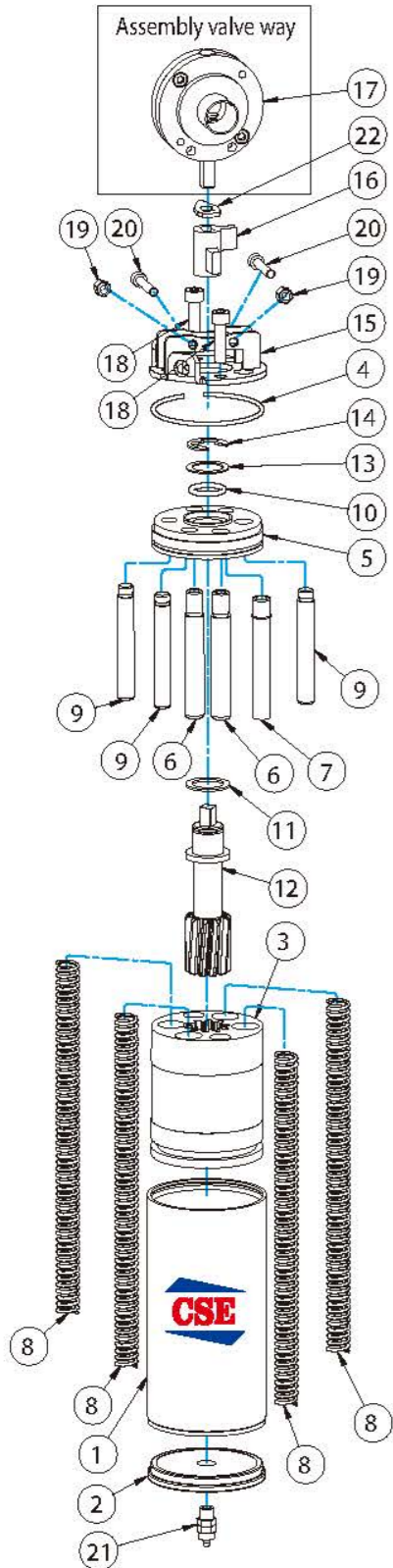
- C101 Actuator apply to butterfly valve in size 4"-6" of the disc head DIA. 12mm X 12mm.
- Control ways:
 - Signal transfer:
 - Can be connect with M18 or M12 screw proximity switch (PNP or NPN) as (1)
 - With 10-30 VDC proximity switch contact: 1 or 2pcs (PNP OR NPN)
 - Or 3A 125VAC. 30VDC microswitch: 2pcs
 - Individual control: Choice (a) or (b) or (c) + DC24 3.0W electric valve: 1pc & air manifold (for complete control box).
- Air/Air (double effect) actuator or air/spring (simple effect) actuator are available.
- Accessories: adapter: 1pcs ; M6 X 40 screw: 2pcs ; washer: 4pcs ; M6 nut: 2pcs ; 1/8PT quick coupler: 1pcs

CSE Auto Control Actuator for Butterfly Valve (Warn Gear Design)

C3 Type construction assembly drawing & items list

Max. output torque 20N/M on C2 & C3

Max. output torque 30N/M on C101

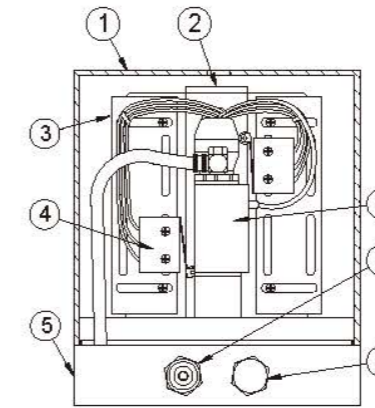
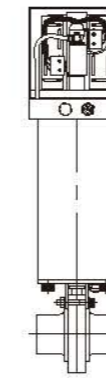


Parts List			
Item	Parts name	Q'TY	Material
1	St.St. cylinder	1	St.St. 304
2	St.St. cylinder cap	1	St.St. 304
3	Piston stem	1	Tenac 4010/SH410
4	Lock wire clip	1	St.St. 304
5	Lower cylinder end	1	St.St. 304
6	Piston guide part	2	St.St. 304
7	Piston guide part	1	St.St. 304
8	Compress spring	4	St.St. 304
9	Piston guide part	3	St.St. 304
10	Piston axle O-ring	1	Teflon
11	Teflon gasket	1	Teflon
12	Coupling axle piece	1	St.St. 304
13	Contact seal	1	St.St. 304
14	Circlip	1	St.St. 304
15	Mounting bracket	1	St.St. 304
16	Connection piece	1	St.St. 304
17	Assembly valve way	1	St.St. 304/316(L)
18	M8x12 St.St. screw	2	St.St. 304
19	M6 Nut	2	St.St. 304
20	M6x35 St.St. screw	2	St.St. 304
21	Air connection	1	Copper
22	Positioning index	1	St.St. 304

CSE Control Box for Auto Actuator and Divert Valve

C2 & C101

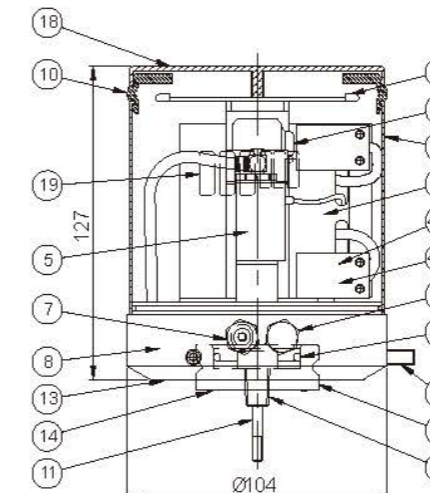
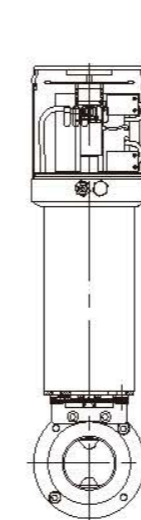
C2-LED



Control box construction assembly drawing & items list

Parts List			
Item	Parts name	Q'TY	Material
1	Cover	1	PC or St.St 304
2	Switch plate	1	St.St 304
3	Plastic hanger	2	St.St 304
4	Micro switch	2	3A 125VAC, 30VDC
5	Air manifold	1	P.O.M (Plastic) or St.St 304
6	Electrovalve	1	DC24 3.0W
7	Air connection	1	Cu
8	E/N connect	1	St.St 304

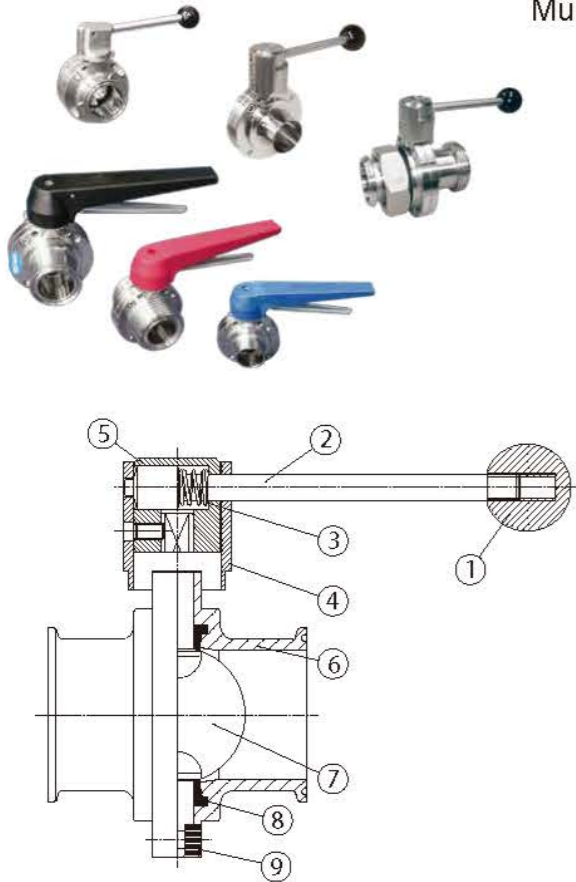
C3 #-LED



Parts List			
Item	Parts name	Q'TY	Material
1	Cover	1	St.St 304
2	LED Light	1	
3	Switch bracket	1	St.St 304
4.1	Proximity sensor	2	3A 125VAC, 30VDC
4.2	Mirco switch	2	3A 125VAC, 30VDC
5	Electrovalve	1	DC24 3.0W AC110V AC220V
6	E/N connect piece	1	St.St 304
7	Air connection	1	Cu
8	Air manifold	1	P.O.M St.St 304
9	Contact head	1	St.St 304
10	Light screen	1	PC
11	Senser pin	1	St.St 304
12	Plate	1	St.St 304
13	O-Ring	1	NBR
14	O-Ring	1	NBR
15	Adapter (3/8" NPT)	1	St.St 304
16	O-Ring	1	NBR
17	Set screw	3	St.St 304
18	Top cover	1	St.St 304/PE
19	PCB board	1	

CSE Range of Butterfly Valve

Multi Connection With St.St Pull Handle, 4 Position



Item	Parts List
1	Knob
2	Steel-Bar
3	Spring St.st
4	Fixed Piece
5	Holder
6	Body
7	Disc
8	EPDM Rubber Seat
9	Screw Bolt

Torque for Full Open/Close

1.0"	< 9.8 N.m
1.5"	< 9.8 N.m
2.0"	13 N.m
2.5"	15 N.m
3.0"	20 N.m
4.0"	30 N.m
6.0"	70 N.m

*1kgf-m = 9.8 N.m = 86.8 lbf-in = 7.23 lbf-ft

Width Range of CSE Butterfly Valve-C & C Type

Body: SUS304 \ 316L material made out from precision CNC milling machined.

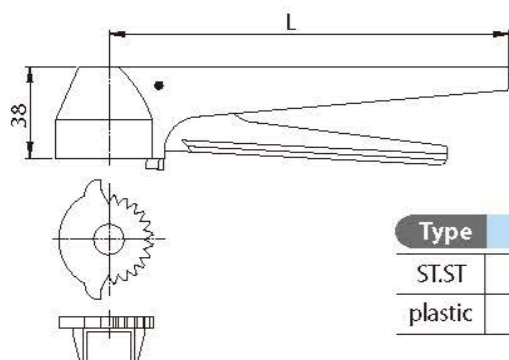
Body can be changeable, and low torque. BS \ SMS \ DIN \ 3A Weld end and Male/Male end and Clamp end.

Disk: Made out from full machined, high polished. Ra less than 0.6 μ m. 9.5x9.5mm and 8x12mm, 12x12mm head for USA and europe required. Electropolished and PTFE coating can be required.

Handle: Different nylon re-forced and stainless steel handle gripper, pull, Press type.

From 2 Position-12 Position, designed for your width range choice.

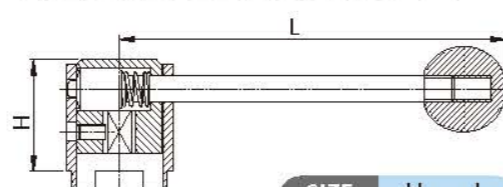
GRIPPER HANDLE 12 POSITION-G12
(NYLON & STAINLESS)



Type	L
ST.ST	159
plastic	167

Can fit \square 9.5x9.5 and \square 12x8 or \square 12x12

PULL HANDLE 4 POSITION-P4



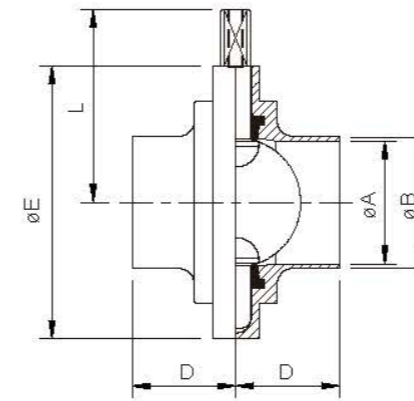
SIZE	H	L
1.0"~3.0"	41.7	145
4.0"	41.7	175
6.0"	52.5	212.5

Can fit \square 9.5x9.5 and \square 12x8 or \square 12x12

Other Handle

CSE Full Forged Butterfly Valves

Weld End



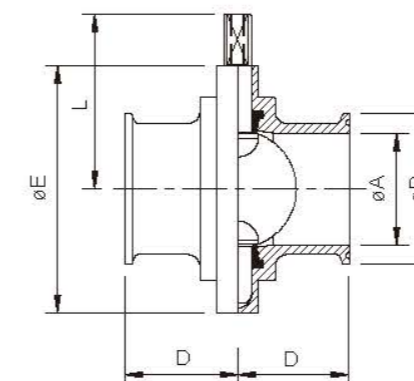
DIN WELD BUTTERFLY VALVE

SIZE	A type		B type		D	ØE	L
	ØA	ØB	ØA	ØB			
DN10	10	13	9	12	34	79	61
DN15	16	19	15	18	34	79	61
DN20	20	23	19	22	34	79	61
DN25	26	29	25	28	34	79	61
DN32	32	35	31	34	38	85	64.3
DN40	38	41	37	40	38	90	66.7
DN50	50	53	49	52	40	105	77.6
DN65	66	70	70	70	41	125	84.8
DN80	81	85	85	85	42	137	91.6
DN100	97.6	101.6	101.6	101.6	44	157	101.75
	100	104	104	104	44	157	101.75

IMPERIAL OD/BS/SMS WELD BUTTERFLY VALVE

SIZE	ØA	ØB	SIZE	ØA	ØB	D	ØE	L
1/2"	9.4	12.7	—	—	—	34	79	61
3/4"	15.75	19.05	—	—	—	34	79	61
1.0"	22.1	25.4	DN25	22.5	25	34	79	61
1.5"	34.8	38.1	DN38	35.5	38	38	85	64.3
2.0"	47.5	50.8	DN50	48.5	51	40	105	74.3
2.5"	60.2	63.5	DN63	60.3	63.5	40	112	77.6
3.0"	72.9	76.2	DN76	72.9	76.1	41	125	84.8
4.0"	97.4	101.6	DN100	100	104	44	157	101.75
6.0"	146.86	152.4	—	—	—	40	216.5	132.5

Clamp End

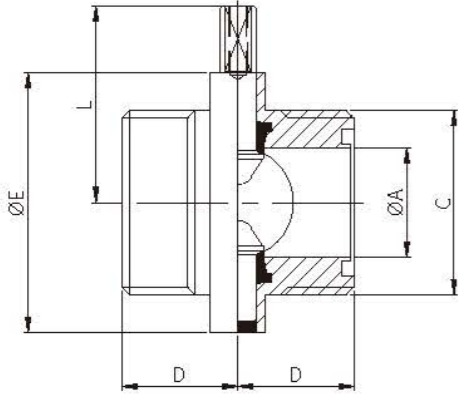


IMPERIAL OD CLAMP BUTTERFLY VALVE

SIZE	ØA	ØB	D	ØE	L
1/2"	9.4	25.2	34	79	61
3/4"	15.75	25.2	34	79	61
1.0"	22.1	50.5	33	79	61
1.5"	34.8	50.5	33	85	64.3
2.0"	47.5	64	35	105	74.3
2.5"	60.2	77.5	35	112	77.6
3.0"	72.2	91	38	125	84.8
4.0"	97.6	119	38	157	101.75
6.0"	146.86	166.87	70	216.5	132.5

CSE Full Forged Butterfly Valves

Male End



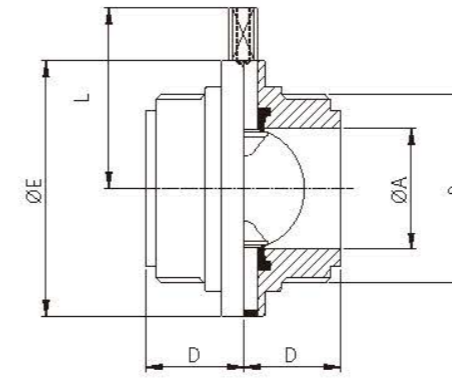
SMS MALE BUTTERFLY VALVE

SIZE	ØA	C	D	ØE	L
DN25	22.5	RD40x1/6	34	79	61
DN38	35.4	RD60x1/6	38	85	64.3
DN50	48	RD70x1/6	40	105	74.3
DN63	60.2	RD85x1/6	40	112	77.6
DN76	72.1	RD98x1/6	41	125	84.8
DN100	97.6	RD125x1/4	50	157	101.75
DN100	100	RD125x1/4	50	157	101.75



CSE Range of Butterfly Valve

Male End

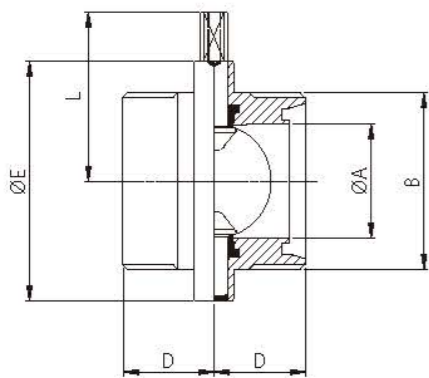


IDF MALE/MALE BUTTERFLY VALVE

SIZE	ØA	B	D	ØE	L
1.0"	22.4	37.13x8T ACME	34	79	61
1.5"	35.1	50.65x8T ACME	38	85	64.3
2.0"	47.8	64.16x8T ACME	40	105	74.3
2.5"	60.5	77.76x8T ACME	40	112	77.6
3.0"	72.1	91.19x8T ACME	41	125	84.8
4.0"	97.6	125.9x6T ACME	44	157	101.75



Male End

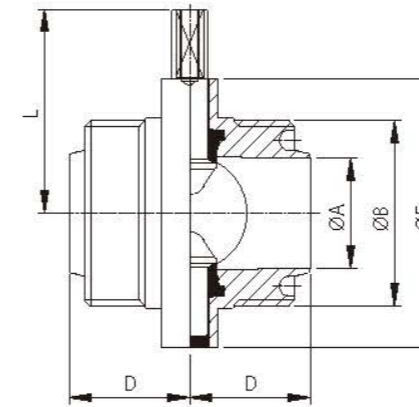


DIN MALE BUTTERFLY VALVE

SIZE	ØA	B	D	ØE	L
DN25	26	RD52*1/6	34	79	61
DN32	32	RD58*1/6	38	85	64.3
DN40	38	RD65*1/6	38	90	66.7
DN50	50	RD78*1/6	40	105	77.6
DN65	66	RD95*1/6	41	125	84.8
DN80	81	RD110*1/4	42	137	91.6
DN101.6	99	RD130*1/4	50	157	101.75
DN104	100	RD130*1/4	50	157	101.75



Male End



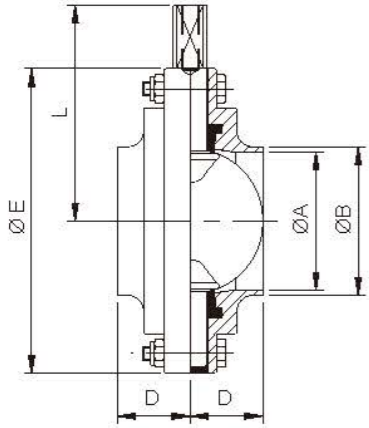
RJT MALE/MALE BUTTERFLY VALVE

SIZE	ØA	B	D	ØE	L
1.0"	22.2	45.72x8T WHIT	34	79	61
1.5"	34.82	58.42x8T WHIT	38	85	64.3
2.0"	47.52	72.72x6T WHIT	40	105	74.3
2.5"	60.2	85.42x6T WHIT	40	112	77.6
3.0"	72.9	98.12x6T WHIT	41	125	84.8
4.0"	97.69	123.52x6T WHIT	50	157	101.75



CSE Full Forged Butterfly Valve

CSE G TYPE



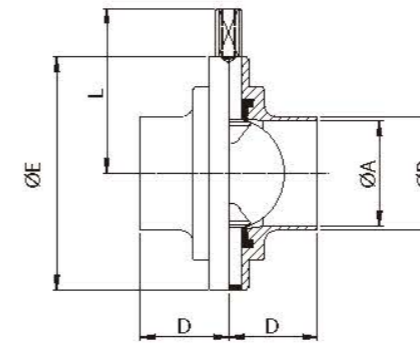
DIN WELD/WELD BUTTERFLY VALVE

SIZE	ØA	ØB	D	ØE	L
DN25	26	29	20	79	61
DN32	32	35	21	85	64.3
DN40	38	41	25	90	66.7
DN50	50	53	25	105	77.6
DN65	66	70	25	125	84.8
DN80	81	85	30	137	91.6
DN100	100	104	32	157	101.75



CSE Wine Macon Butterfly Valve

Macon Butterfly Valve

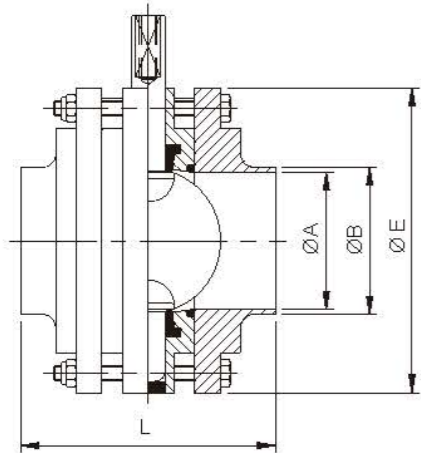


WINE WELD/WELD BUTTERFLY VALVE

SIZE	ØA	ØB	D	ØE	L
DN40/43	40	43	37	90	61
DN50/53	50	53	40	105	64.3
DN60/63	60	63	40	112	74.3
DN70/73	70	73	41	125	77.6
DN80/83	80	83	40	137	84.8
DN100/103	100	103	44	157	101.6



3 Piece G Type Butterfly Valves

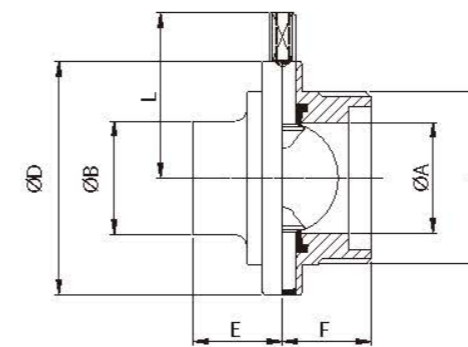


DIN WELD BUTTERFLY VALVE

SIZE	ØA	ØB	ØE	L
DN25	26	29	79	89
DN32	32	35	85	89
DN40	38	41	90	98.2
DN50	50	53	105	98.2
DN65	66	70	125	98.2
DN80	81	85	137	134.2
DN100	100	104	157	134.2



Macon Butterfly Valve



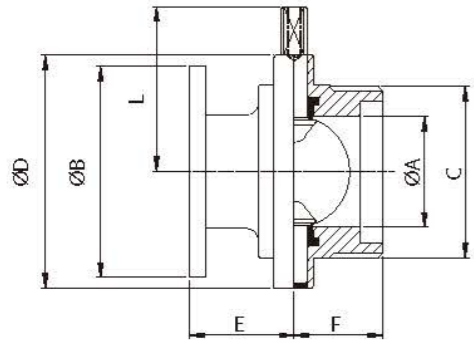
WINE WELD/MALE BUTTERFLY VALVE

SIZE	ØA	ØB	C	ØD	E	F	L
DN40/43	40	43	M55x3	90	37	37	61
DN50/53	50	53	M67x3	105	40	40	64.3
DN60/63	60	63	M79x3.5	112	40	40	74.3
DN70/73	70	73	M90x3.5	125	41	41	77.6
DN80/83	80	83	M102x4	137	40	40	84.8
DN100/103	100	103	M125x4	157	44	45	101.6



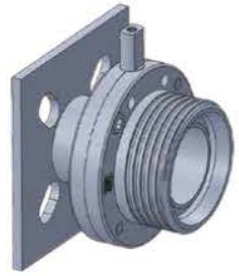
CSE Wine Macon Butterfly Valve

Macon Butterfly Valve

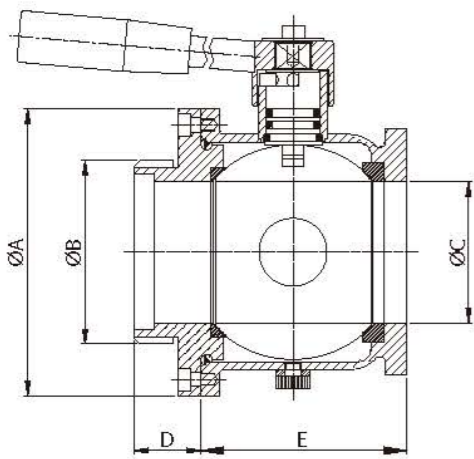


WINE MALE/FLANGE BUTTERFLY VALVE

SIZE	ØA	ØB	C	ØD	E	F	L
DN40/43	40	100	M55x3	90	45	37	61
DN50/53	50	100	M67x3	105	48	40	64.3
DN60/63	60	120	M79x3.5	112	50	40	74.3
DN70/73	70	120	M90x3.5	125	51	41	77.6
DN80/83	80	140	M102x4	137	50	40	84.3
DN100/103	100	140	M125x4	157	55	44	101.6



CSE Wine Ball Valve

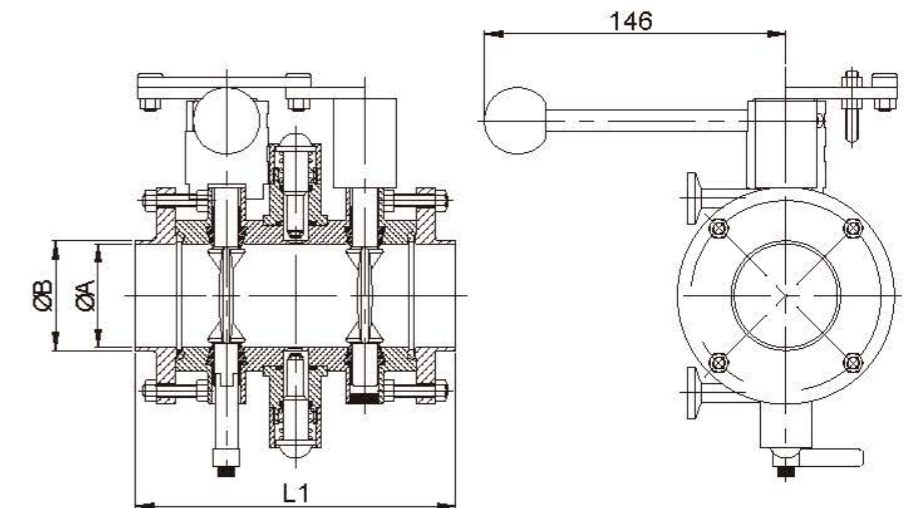
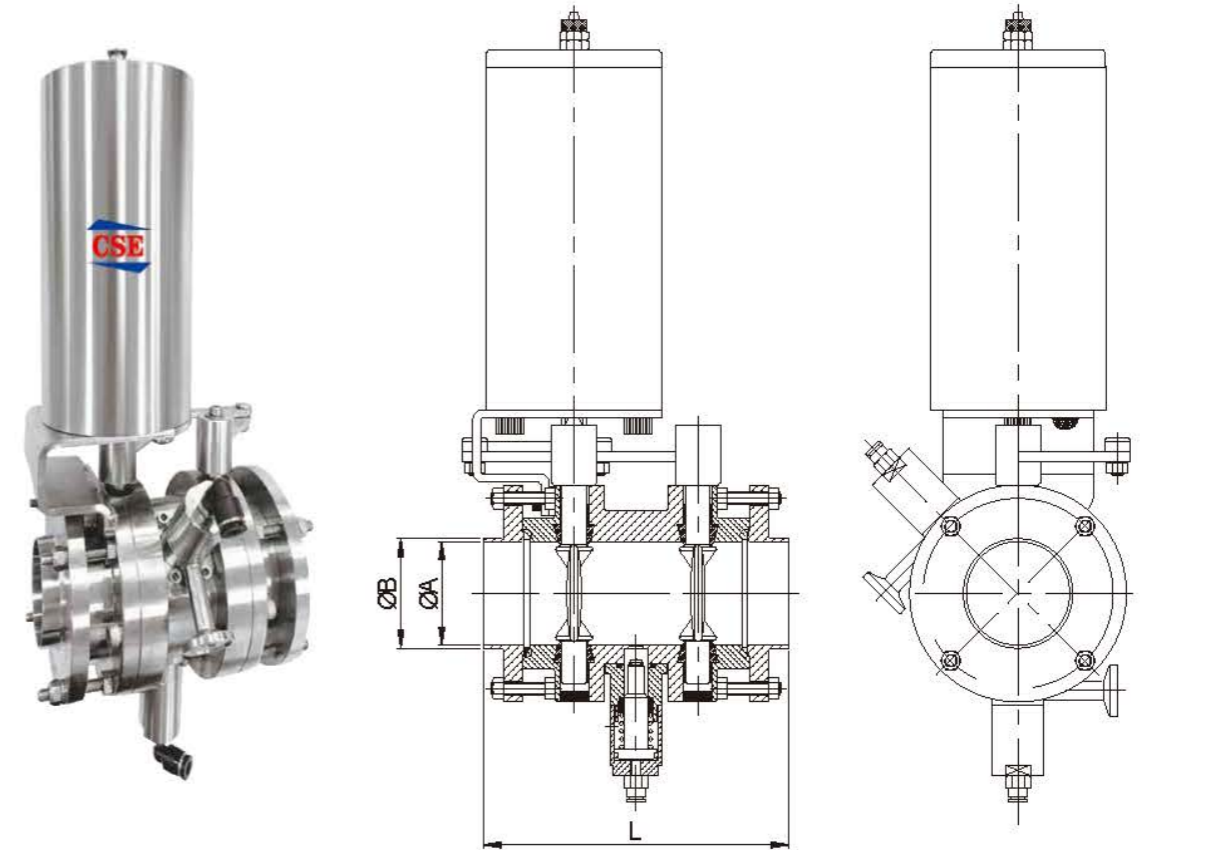


WINE MALE/FLANGE BALL VALVE

SIZE	ØA	ØB	ØC	D	E
DN43	94	M55x3	40	32.6	72
DN53	105	M67x3	50	33	79
DN73	140	M90x3.5	69	33	100



Mix-Proof Butterfly Valve Series



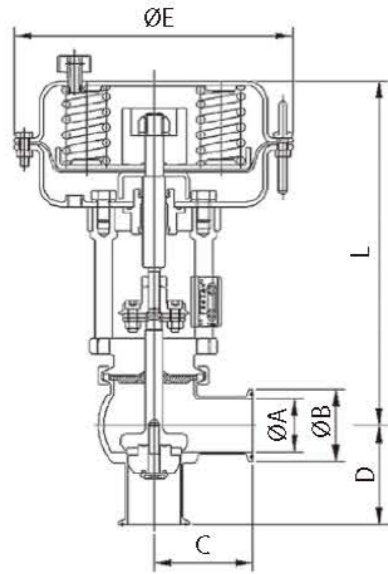
DIN

SIZE	ØA	ØB	L	L1
DN40	37	40	143	150
DN50	49	52	148	155
DN65	66	70	160	167
DN80	81	85	176	183
DN100	100	104	200	207

Imperial

SIZE	ØA	ØB	L	L1
1.5"	34.8	38.1	143	150
2.0"	47.5	50.8	148	155
2.5"	60.2	63.5	160	167
3.0"	72.9	76.2	176	183
4.0"	97.4	101.6	200	207

CSE Manual and Auto Control Modulating Valve


PNEUMATIC MODULATING VALVE TYPE L

SIZE	ØA	ØB	C	D	ØE	L
1.0"	22.1	50.5	58.5	50.6	250	489
1.5"	34.8	50.5	81.2	61	300	557
2.0"	47.5	64	85.7	65.4	300	564
2.5"	60.2	77.5	103.1	72.1	300	580
3.0"	72.9	91	116.4	79.7	350	651



Size Range : From DN25 (1") to DN100 (4")

Leakage standard : PTFE materialer soft seats meet FDA.

Travel : 20mm for DN25 (1") to DN50 (2"), 30mm for DN65 (2-1/2") to DN100 (4")

Surface finish : 0.4µm for Internal ; 0.8µm for external

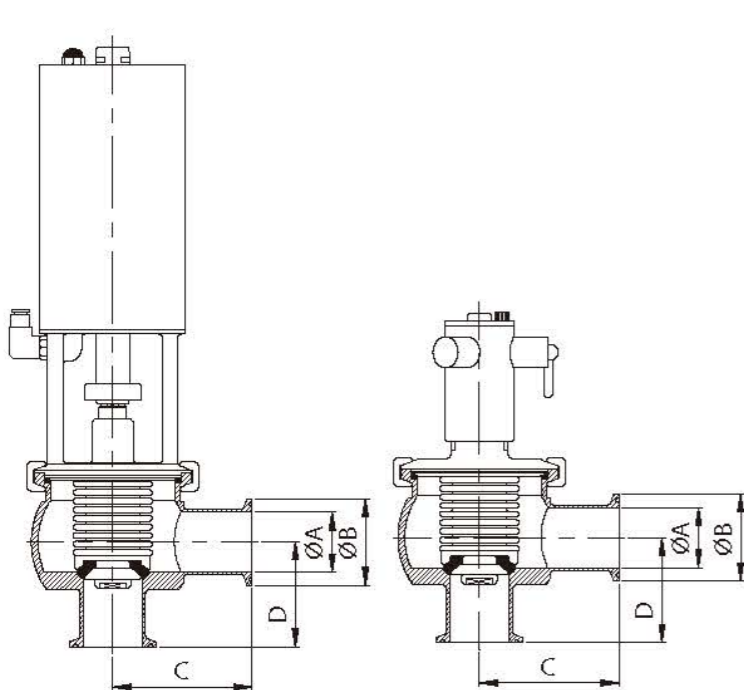
Actuator : Stainless steel diaphragm actuator cases make resist to get rusty out door, and accept polish finish optional case.

Support air supply fail to open and close.

Connection : Clamp connections accord to ISO 2852.

Quick Change Trim : Each size has 2 to 4 flow capacity plug chokes, and allows to quickly change the plug. Easy to maintenance.

Pneumatic and Manual Control Bellow Valves


BELLOW STERILE VALVES

SIZE	ØA	ØB	C	D
1.0"	22.1	50.5	58.5	50.6
1.5"	34.8	50.5	81.2	61
2.0"	47.5	64	85.7	65.4

CSE Non Return Valve (Check Valve)



NO.	NAME
1	Short Body
2	Long Body
3	Clamp
4	13PG
5	Seal-Ring
6	STST Spring
7	Flow Support Plate
8	Disc

CSE Check Valve :

Materials

Steel parts : Stainless steel SS316(L)

Seal rings : EPDM Rubber or Silicone/Viton (FKM)

Finish : OD ≤ 0.8, ID ≤ 0.8 or 0.4µm

Connections

The valve is available with welding ends for tubing according to 3A, SMS, BS, DIN

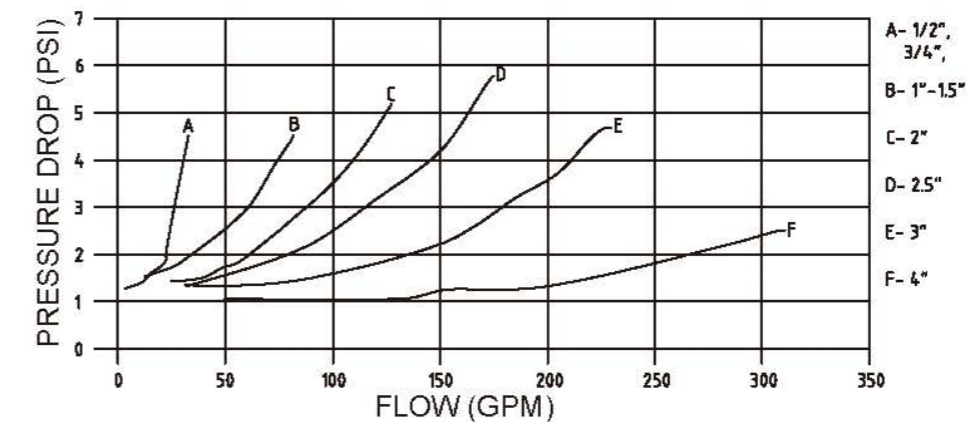
Technical data

Required different pressure for opening the valve fitted in a vertical pipe, as shown in fig.3, the working pressure Max. product pressure : 1000kpa(10bar)

Material grades

Gasket-Body:EPDM/Silicone/FKM/NBR/PTFE

Flow Area-EPDM/Silicone/FKM/NBR

SPRING CHECK VALVE flow rate (fig 3)


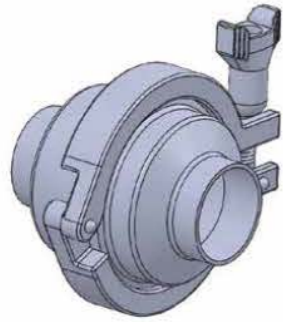
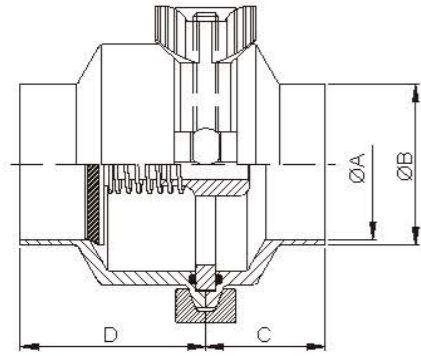
Note:
For the diagram the following applies:
Medium : Water(20°C)

Open pressure (PSI)

1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"
0.5	0.5	3.0	1.6	0.6	1.3	0.8	0.9

Open Pressure (fig. 1)

CSE Non-Return Valve



CHECK VALVE MIDDLE CLAMP TYPE/WELD END

3A/BS	ØA	ØB	C	D
1/2"	9.4	12.7	23	34
3/4"	15.75	19.05	23	34
1.0"	22.1	25.4	38	59
1.5"	34.8	38.1	38	59
2.0"	47.5	50.8	38	59
2.5"	60.2	63.5	38	59
3.0"	72.9	76.2	38	59
4.0"	97.6	101.6	44	50

SMS	ØA	ØB	C	D
DN25	22.5	25	38	59
DN38	35.4	38	38	59
DN50	48	51	38	59
DN63	60.3	63.5	38	59
DN76	72.1	76	38	59

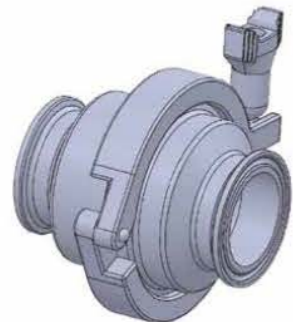
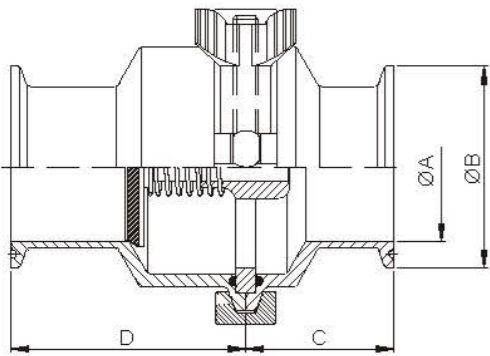
DIN	ØA	ØB	C	D
DN25	25	28	38	59
DN32	31	34	38	59
DN40	37	40	38	59
DN50	49	52	38	59
DN65	66	70	38	59

CHECK VALVE MIDDLE CLAMP TYPE/CLAMP END

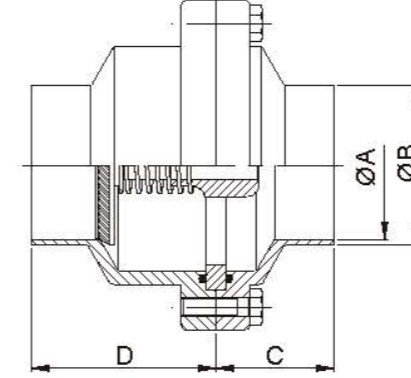
3A/BS	ØA	ØB	C	D
1/2"	9.4	25.2	28.5	39.5
3/4"	15.75	25.2	28.5	39.5
1.0"	22.1	50.5	42	59
1.5"	34.8	50.5	42	59
2.0"	47.5	64	42	59
2.5"	60.2	77.5	42	59
3.0"	72.9	91	42	59

SMS	ØA	ØB	C	D
DN25	22.5	50.5	42	59
DN38	35.4	50.5	42	59
DN50	48	64	42	59
DN63	60.3	77.5	42	59
DN76	72.1	91	42	59

DIN	ØA	ØB	C	D
DN25	25	50.5	42	59
DN32	31	50.5	42	59
DN40	37	50.5	42	59
DN50	49	64	42	59
DN65	66	91	42	59
DN80	81	106	42	59



CSE Non-Return Valve



CHECK VALVE MIDDLE FLANGE TYPE/WELD END

3A/BS	ØA	ØB	C	D
1/2"	9.4	12.7	23	34
3/4"	15.75	19.05	23	34
1.0"	22.1	25.4	38	59
1.5"	34.8	38.1	38	59
2.0"	47.5	50.8	38	59
2.5"	60.2	63.5	38	59
3.0"	72.9	76.2	38	59
4.0"	97.6	101.6	44	50

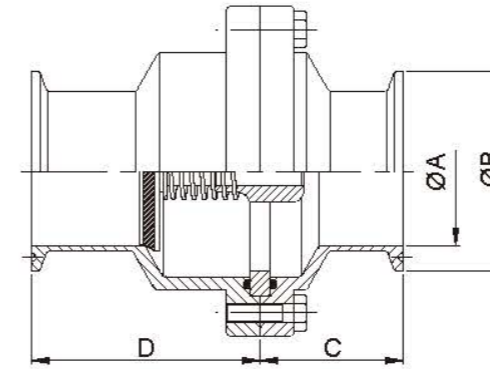
SMS	ØA	ØB	C	D
DN25	22.5	25	38	59
DN38	35.4	38	38	59
DN50	48	51	38	59
DN63	60.3	63.5	38	59
DN76	72.1	76	38	59

DIN	ØA	ØB	C	D
DN25	25	28	38	59
DN32	31	34	38	59
DN40	37	40	38	59
DN50	49	52	38	59
DN65	66	70	38	59
DN80	81	85	38	59

CHECK VALVE MIDDLE FLANGE TYPE/CLAMP END

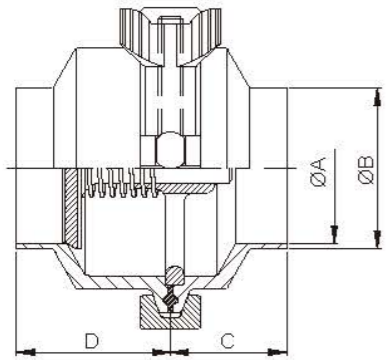
3A/BS	ØA	ØB	C	D
1/2"	9.4	25.2	28.5	39.5
3/4"	15.75	25.2	28.5	39.5
1.0"	22.1	50.5	42	59
1.5"	34.8	50.5	42	59
2.0"	47.5	64	42	59
2.5"	60.2	77.5	42	59
3.0"	72.9	91	42	59
4.0"	97.6	119	56.7	62.6

SMS	ØA	ØB	C	D
DN25	22.5	50.5	42	59
DN38	35.4	50.5	42	59
DN50	48	64	42	59
DN63	60.3	77.5	42	59
DN76	72.1	91	42	59



CSE Non-Return Valve

PG TYPE



CHECK VALVE MIDDLE CLAMP TYPE/WELD END

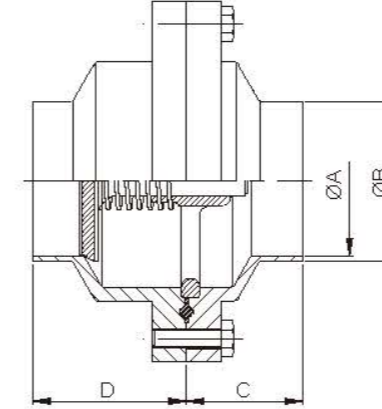
3A/BS	ØA	ØB	C	D
1/2"	9.4	12.7	24	34
3/4"	15.75	19.05	24	34
1.0"	22.1	25.4	34	48
1.5"	34.8	38.1	36	48
2.0"	47.5	50.8	36	48
2.5"	60.2	63.5	36	48
3.0"	72.9	76.2	36	48
4.0"	97.6	101.6	47	54

SMS	ØA	ØB	C	D
DN25	22.5	25	34	48
DN38	35.5	38	36	48
DN50	48.5	51	36	48
DN63	60.3	63.5	36	48
DN76	72.1	76.1	36	48
DN100	100	104	47	54

DIN	ØA	ØB	C	D
DN25	25	28	24	34
DN32	31	34	24	34
DN40	37	40	34	48
DN50	49	52	36	48
DN65	66	70	36	48
DN80	81	85	36	48
DN100	100	104	47	54

CSE Non-Return Valve

PG TYPE



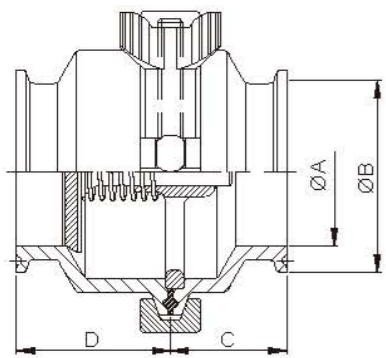
CHECK VALVE MIDDLE FLANGE TYPE/WELD END

3A/BS	ØA	ØB	C	D
1.0"	22.1	25.4	34	48
1.5"	34.8	38.1	36	48
2.0"	47.5	50.8	36	48
2.5"	60.2	63.5	36	48
3.0"	72.9	76.2	36	48
4.0"	97.6	101.6	47	54

SMS	ØA	ØB	C	D
DN25	22.5	25	34	48
DN38	35.5	38	36	48
DN50	48.5	51	36	48
DN63	60.3	63.5	36	48
DN76	72.1	76.1	36	48
DN100	100	104	47	54

DIN	ØA	ØB	C	D
DN25	25	28	34	48
DN32	31	34	36	48
DN40	37	40	36	48
DN50	49	52	36	48
DN65	66	70	36	48
DN80	81	85	36	48

PG TYPE



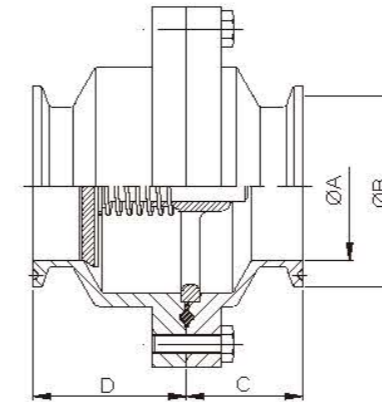
CHECK VALVE MIDDLE CLAMP TYPE/CLAMP END

3A/BS	ØA	ØB	C	D
1/2"	9.4	25.2	28.5	39.5
3/4"	15.75	25.2	28.5	39.5
1.0"	22.1	50.5	34	48
1.5"	34.8	50.5	36	48
2.0"	47.5	64	36	48
2.5"	60.2	77.5	36	48
3.0"	72.9	91	36	48
4.0"	97.6	119	47	54

SMS	ØA	ØB	C	D
DN25	22.5	50.5	34	48
DN38	35.5	50.5	36	48
DN50	48.5	64	36	48
DN63	60.3	77.5	36	48
DN76	72.1	91	36	48
DN100	100	119	47	54

DIN	ØA	ØB	C	D
DN25	25	50.5	34	48
DN32	31	50.5	36	48
DN40	37	50.5	36	48
DN50	49	64	36	48
DN65	66	91	36	48
DN80	81	106	36	48
DN100	100	119	47	54

PG TYPE



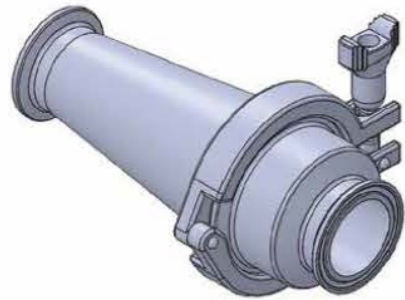
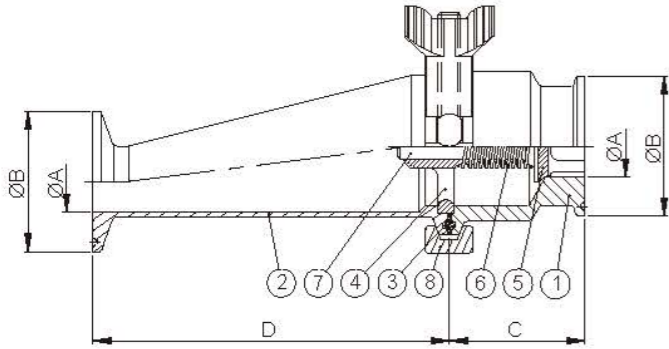
CHECK VALVE MIDDLE FLANGE TYPE/CLAMP END

3A/BS	ØA	ØB	C	D
1.0"	22.1	50.5	34	48
1.5"	34.8	50.5	36	48
2.0"	47.5	64	36	48
2.5"	60.2	77.5	36	48
3.0"	72.9	91	36	48
4.0"	97.6	119	47	54

SMS	ØA	ØB	C	D
DN25	22.5	50.5	34	48
DN38	35.5	50.5	36	48
DN50	48.5	64	36	48
DN63	60.3	77.5	36	48
DN76	72.1	91	36	48
DN100	100	119	47	54

CSE Non-Return Valve

LEVEL TYPE

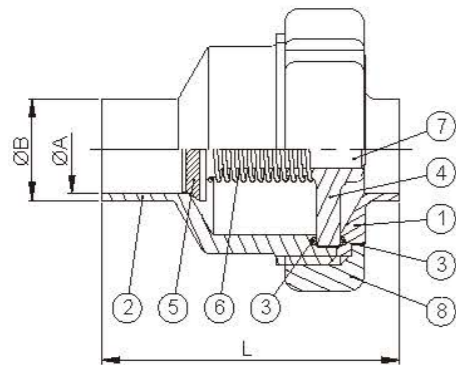


3A ECCENTRIC CHECK VALVE CLAMP END

SIZE	ØA	ØB	C	D
1.0"	22.1	50.5	48	127.3
1.5"	34.8	50.5	48	127.3
2.0"	47.5	64	48	127.3
2.5"	60.2	77.5	48	127.3

NO.	NAME
1	Short body
2	Long body
3	13PG
4	Flow support plate
5	Seal-Ring
6	Spring
7	Disc
8	Clamp

UNION TYPE



3A CHECK VALVE WELD END

SIZE	ØA	ØB	L
1.0"	22.1	25.4	75
1.5"	34.8	38.1	76
2.0"	47.5	50.8	76
2.5"	60.2	63.5	78
3.0"	72.9	76.2	78
4.0"	97.6	101.6	80

NO.	NAME
1	Short body
2	Long body
3	O-Ring
4	Flow support plate
5	Seal-Ring
6	Spring
7	Disc
8	Nut

CSE Hygienic Sight Glass



CSE Hygienic Sight Glass:

Glass: Clean, High Press Pyrex Glass. Max Work 10 bar.
Can be changeable.

Body: SUS304, 316L Precision Machined Body.
With Width Connection End.3A, DIN, SMS, RJT, IDF
Male/Male.Weld and Female End.

Screw Blot: Full Stainless Steel.

Seal: EPDM, Silicone and FKM.

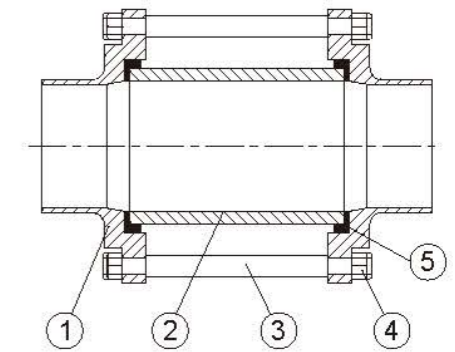
Pyrex Glass data:

Pyrex Borosilicate Glass Composition

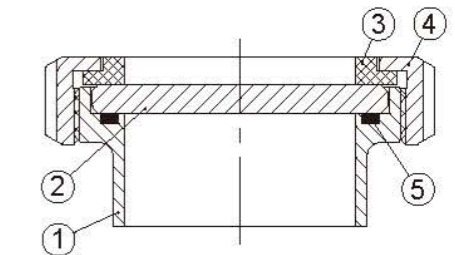
Content %	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	B ₂ O ₃	Na ₂ O	K ₂ O
	80.9	2.3	0.03	12.7	4.0	0.04

Physical Properties

Young's module	6.4x10 ⁵ kg/cm ³
Poisson's ratio	0.20
Shear modules	2.7x10 ⁵ kg/cm ²
Knoop hardness (100g)	418KHN
Bending strength	4~7x10 ⁵ kg/cm ²
Design stress (Safety factor)	67 kg/cm ²



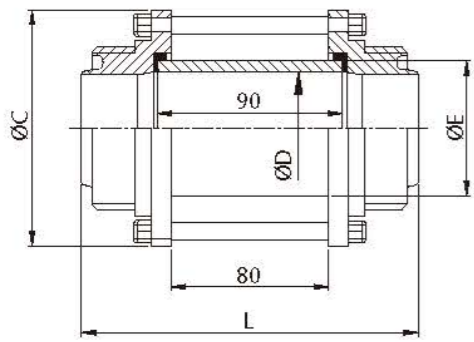
Item	Parts list
1	Body
2	High Pressure Clean Glass
3	Screw Blot
4	Nylon Lock Nut
5	Seal



Item	Parts list
1	Body
2	High Press Clean Glass
3	Teflon Gasket
4	NUT
5	Seal

With weld end only!

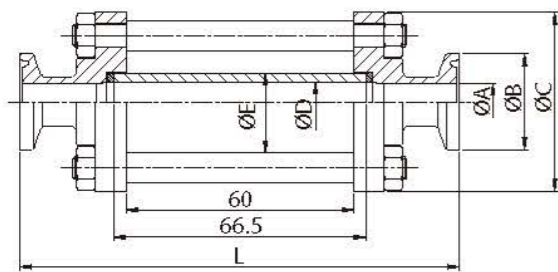
CSE Hygienic Sight Glass



RJT/SMS/DIN/IDF MALE END SIGHT GLASS

SIZE	ØC	ØD	ØE	L
25	79	26	32	148
38	85	34	40	156
50	105	50	60	160
63	112	65	75	160
76	125	75.4	85	162
100	157	100	110	168

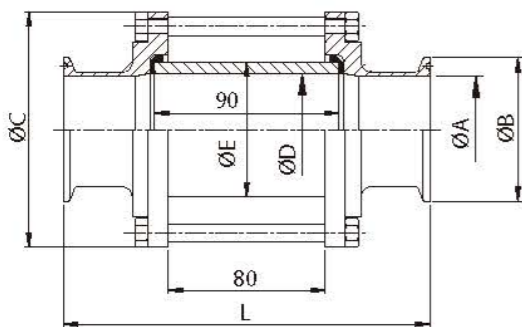
1/2"~3/4"



3A/BS CLAMP END SIGHT GLASS

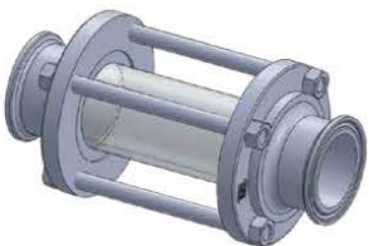
SIZE	ØA	ØB	ØC	ØD	ØE	L
1/2"	9.4	25.2	47	10.2	15	116
3/4"	15.75	25.2	47	17	22	116
1.0"	22.1	50.5	79	26	32	143
1.5"	34.8	50.5	85	34	40	146
2.0"	47.5	64	105	50	60	150
2.5"	60.2	77.5	112	65	75	150
3.0"	72.9	91	125	75.4	85	156
4.0"	97.6	119	157	100	110	156

1"~4"



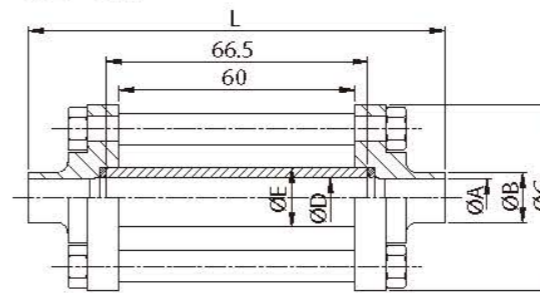
SMS CLAMP END SIGHT GLASS

SIZE	ØA	ØB	ØC	ØD	ØE	L
DN25	22.5	50.5	79	26	32	143
DN38	35.4	50.5	85	34	40	146
DN50	48	64	105	50	60	150
DN63	60.2	77.5	112	65	75	150
DN76	72	91	125	75.4	85	156
DN100	100	119	157	100	110	156



CSE Hygienic Sight Glass

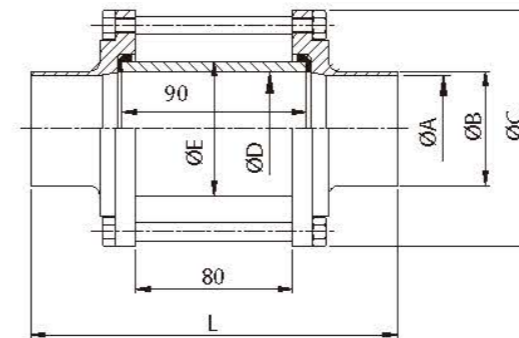
1/2"~3/4"



3A/BS WELD END SIGHT GLASS

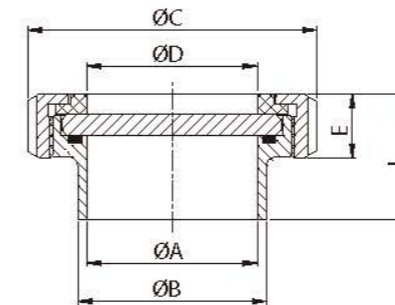
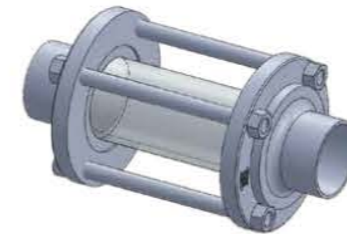
SIZE	ØA	ØB	ØC	ØD	ØE	L
1/2"	9.4	12.7	47	10.2	15	106
3/4"	15.75	19.05	47	17	22	106
1.0"	22.1	25.4	79	26	32	148
1.5"	34.8	38.1	85	34	40	156
2.0"	47.5	50.8	105	50	60	160
2.5"	60.2	63.5	112	65	75	160
3.0"	72.9	76.2	125	75.4	85	162
4.0"	97.6	101.6	157	100	110	167

1"~4"



SMS WELD END SIGHT GLASS

SIZE	ØA	ØB	ØC	ØD	ØE	L
DN25	22.5	25	79	26	32	148
DN38	35.4	38	85	34	40	156
DN50	48	51	105	50	60	160
DN63	60.2	63.5	112	65	75	160
DN76	72	76	125	75.4	85	162
DN100	100	104	157	100	110	168



DIN WELD END SIGHT GLASS

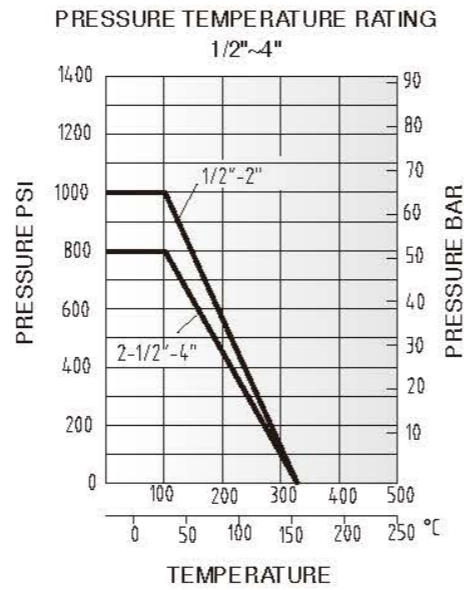
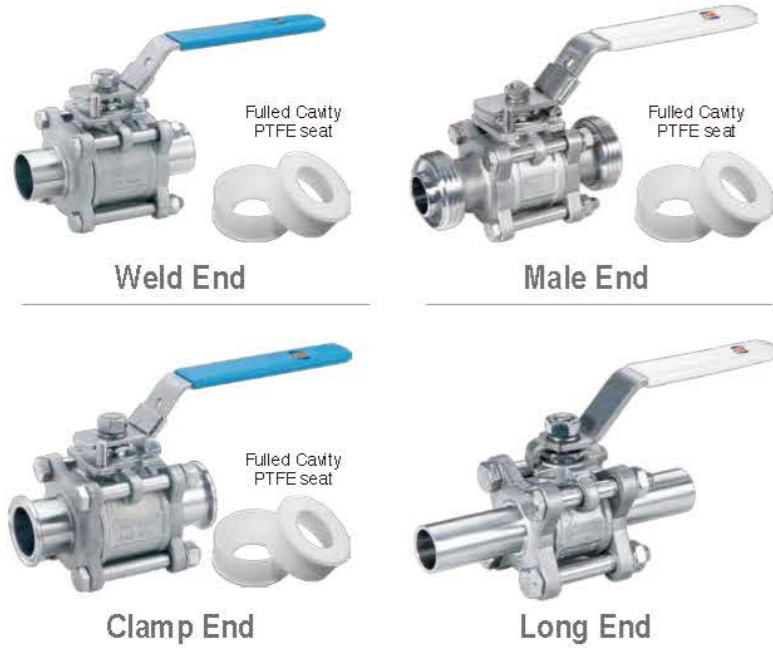
SIZE	ØA	ØB	ØC	ØD	E	L
DN25	26	35	63	26	21	37
DN32	32	41	70	32	21	40
DN40	38	48	78	38	21	41
DN50	50	61	92	50	22	42.5
DN65	66	79	112	66	25	48.5
DN80	81	93	127	82	29	52.5
DN100	100	114	148	100	31	61.5

SMS WELD END SIGHT GLASS

SIZE	ØA	ØB	ØC	ØD	E	L
DN25	22.5	25	51	22.5	19	34
DN38	35.5	38	74	35.5	23	40
DN50	48.5	51	84	48.5	24	42
DN63	60.5	63.5	100	60.5	28	46
DN76	72.9	76.1	114	72.9	30	47
DN100	100	105	138	100	31	49



Ball Valve For Food And BPE Use With ISO Mount Plate Weld/male/clamp End-fulled Cavity Seat



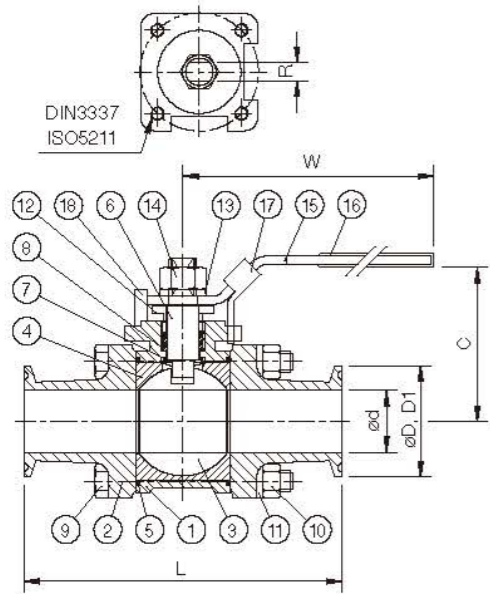
- Lock device can be required.
- 100% air tested under water at 100psi, open and closed positions.
- Hydrostatic test pressure :
Body W.P 1000 PSI Tube End W.P 200 PSI
- Standard End: Weld & Clamp-End
Other SMS. DIN. RJT. IDF
Male/Male can be required.

Specifications for clamp & weld end

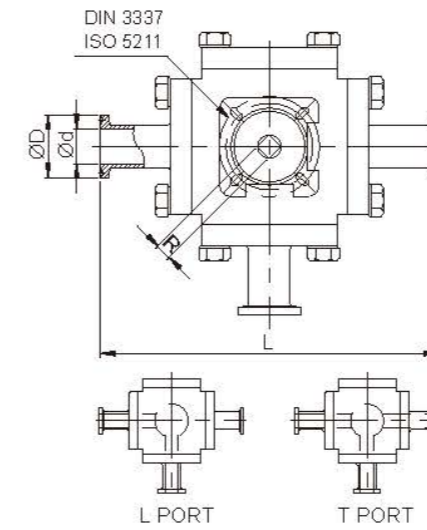
SIZE	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"
	DN15	DN20	DN25	DN40	DN50	DN65	DN80	DN100
ISO-5211	F03	F03	F04	F05	F05	F07	F07	F10
C	58.3	62.9	68	87	95	127	136	159
ød	9.4	15.75	22.1	34.8	47.5	60.2	72.9	97.4
øD	25.2	25.2	50.5	50.5	64	77.5	91	119
øD1	12.7	19.05	25.4	38.1	50.8	63.5	76.2	101.6
L	89	101	114	140	156	197	229	243
R	5	5	6.5	8.5	8.5	12	12	16
W	130	130	166.7	194.3	194.3	252	252	333
L1	135	135	165	165	190	205	265	306

Parts List

Item	Part Name	Material
1	Body	ASTM-A743-CF8M
2	Cap	ASTM-A743-CF8M
3	Ball	A351-CF8M
4	Seat	PTFE
5	Gasket	PTFE
6	Stem	SUS316
7	Thrust washer	PTFE
8	Stem packing	PTFE
9	Bolt	SUS304
10	Hex nut	SUS304
11	Bolt washer	SUS304
12	Gland	SUS304
13	Washer	SUS304
14	Nut	SUS304
15	Handle	SUS304
16	Plastic cover	Plastic
17	Lock device	SUS304
18	Stop pin	SUS304

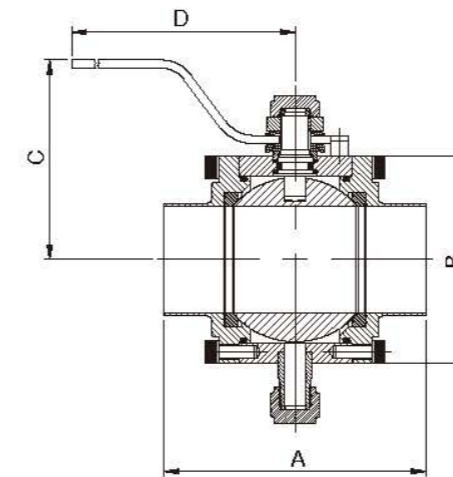


Sanitary-Ball Valve For Food Chemical, and Vacuum use. With ISO Mount Plate Weld/Male End



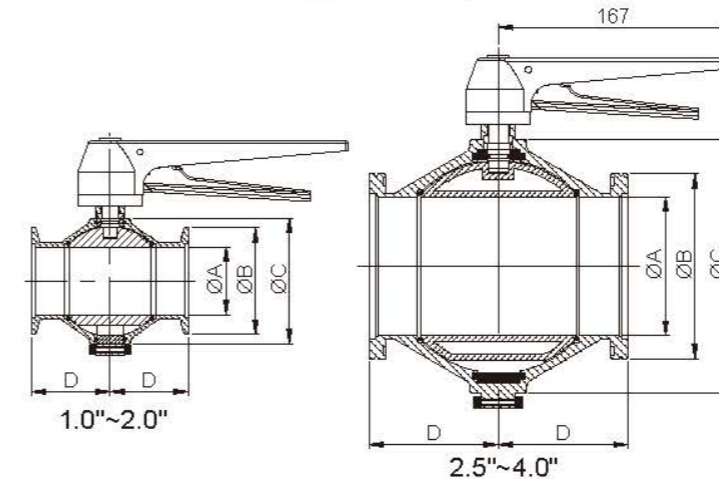
SIZE	ISO-5211	ød	øD	L	R
1/2"	DN15	F03	9.5	25.4	118
3/4"	DN20	F03	15.8	25.4	127
1.0"	DN25	F04	22.2	50.4	152.6
1.5"	DN40	F05	35	50.4	175
2.0"	DN50	F05	47.6	63.9	190
2.5"	DN65	F07	60.2	77.5	228
3.0"	DN80	F10	73	90.9	260.6
4.0"	DN100	F10	97.4	118.9	290

HIGH PURITY BALL VALVE - Filled Cavity PTFE Seat, or Half Cavity Seat



SIZE	A	B	C	D
1.0"	95.3	58.7	60.3	163.5
1.5"	108	77.8	71.4	163.5
2.0"	119	93.7	79.4	163.5
2.5"	135	106.4	85.7	163.5
3.0"	165.1	125.4	95.3	163.5

Vacuum BFV Type Purity Ball Valve



SIZE	øA	øB	øC	D
1.0"	22.1	40	100	45
1.5"	34.8	55	105	55
2.0"	47.5	75	105	55
2.5"	60.2	95	145	65
3.0"	72.9	110	159	79
4.0"	97.4	130	198	91

Sanitary-ball Valve For Food And Chemical Use With ISO Mount Plate Weld/male End



LIMIT SWITCH BOX-ALS10



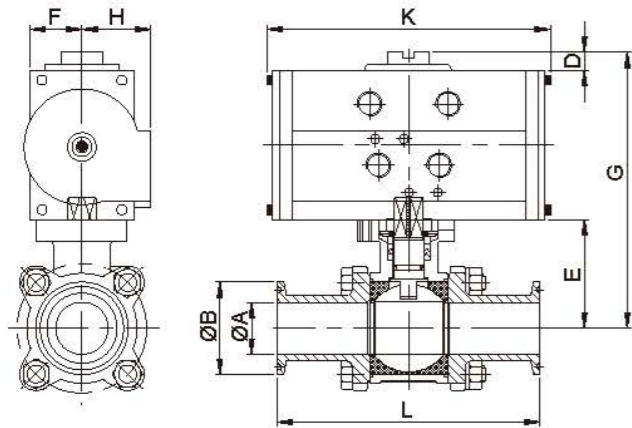
SOLENOID VALVE-SN3101 Series



Actuator can be installed on CSE 2 way or 3 way low & high ISO 5211 mount plate.
(An additional bracket is needed in cases of low plate ball valves)

Material:ASTM-CF8M A351 (316)
Seat:PTFE/PTFE+15% Gass Fiber.

VDA/VSF	DN	D	F	G	H	K
C-125	15	20	28.5	121	33.7	120
C-125	20	20	28.5	131	33.7	120
C-250	25	20	33.6	156.2	47.8	144.3
C-450	40	20	43.5	196.2	51.5	149.2
C-1000	50	20	54.5	227.2	64.5	183
C-1000	65	20	54.5	250.2	64.5	183
C-2250	80	20	65	278.7	75.5	259.6
C-2250	100	20	65	302.2	75.5	259.6



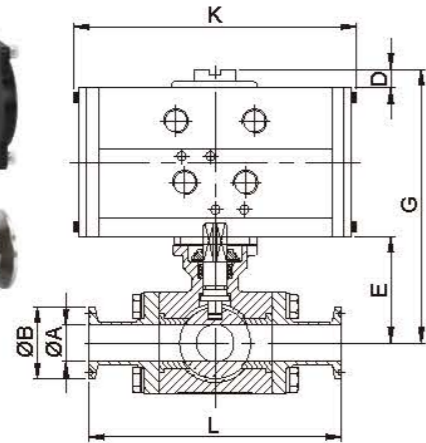
BALL VALVE / SERIES 26

SIZE	ISO-5211	øA	øB	E	L	TORQUE LBS/INCH	
1/2"	DN15	F03/F04	9.4	25.2	38.2	89	90
3/4"	DN20	F03/F04	15.75	25.2	47.5	101	100
1"	DN25	F04/F05	22.1	50.5	57	114	140
1.5"	DN40	F05/F07	34.8	50.5	78.55	140	240
2"	DN50	F05/F07	47.5	64	86.5	156	480
2.5"	DN65	F07/F10	60.3	77.5	109.2	197	650
3"	DN80	F07/F10	73	91	116.2	229	1150
4"	DN100	F10/F12	97.4	119	133.5	241	1400

VDA/VSF	DN	D	F	G	H	K
C-125	15	20	28.5	121	33.7	120
C-125	20	20	28.5	131	33.7	120
C-250	25	20	33.6	156.2	47.8	144.3
C-450	40	20	43.5	196.2	51.5	149.2
C-1000	50	20	54.5	227.2	64.5	183
C-1000	65	20	54.5	250.2	64.5	183
C-2250	80	20	65	278.7	75.5	259.6
C-2250	100	20	65	302.2	75.5	259.6

BALL VALVE / SERIES 26

SIZE	ISO-5211	øA	øB	E	L	TORQUE LBS/INCH	
1/2"	DN15	F03	9.5	25.2	41	118	79
3/4"	DN20	F03	15.8	25.2	47.5	127	85
1"	DN25	F04	22.2	50.5	57	152.6	110
1.5"	DN40	F05	35	50.5	71.5	175	290
2"	DN50	F05	47.6	64	79.8	190	425
2.5"	DN65	F07	60.2	77.5	97.5	228	1085
3"	DN80	F07	73	91	120.5	260.6	1597
4"	DN100	F10	97.4	119	125.5	290	1780



HIGH MOUNT PLATE DESIGN

CSE CHEMICAL Ball VALVE & CHEMICAL UNIONS



Ball Valve

1PC- 800WOG Ball valve NPT, PF, BSPT thread end, PTFE/PTFE+15% glass fiber seat.
2PC- full port reduction port WOG 1,000psi Ball valve, with lock design and ISO 5211 mount plate can be specified.
Flange end: PN 10/16 , JIS 5/10 K
Seat: PTFE/PTFE+15% G.F
3PC- full port-WOG 1,000psi with lock design and ISO5211 mount plate can be specified.
Flange end: PN 10/16 , JIS 5/10 K
Seat: PTFE/PTFE+15% G.F
Design tested to CE 97/23/EC ART 3 § 3 ≤ DN25, and table 6 D1 standard.
ISO5211 mount plate and special design can be specified.



Chemical Unions

CSE makes a full range of lost wax cast 150psi, screw fittings.
We also offer high class chemical screw fittings, unions and nipples...with solid bar, hex bar, pipe and precision CNC finished surface.
Welcome: OEM, ODM, services.



Ball for Valve

Joint CSE Taiwan the abilities of the casting, CNC machining, welding, hydraulic pressure, polishing, multi-surface finished,CSE offer not only OEM parts, but also for parts of products, such as the BALL for ball valve.

Material: Stainless steel 304 / 316 / 316L

2WAY & 3WAY Plug Valves



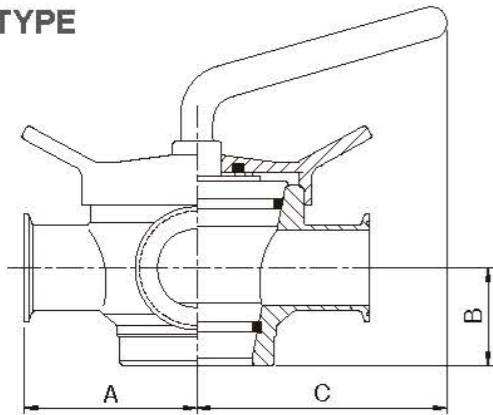
Plug Cock Valve are excellent hygienic design. Base on Taper and not any gasket in flow port. So, big popular use on the Milk industry. CSE Plug Cock combinec European and USA design, using pure materials and excellent processing technologically.

Material Plug- SS304 or SS316L with hard / thick chrome coation for long-term recycling and easy clean maintenance

Connect - Weld, Clamp and Male End.

Max. Work pressure - 3 Bars~ 10 Bars.

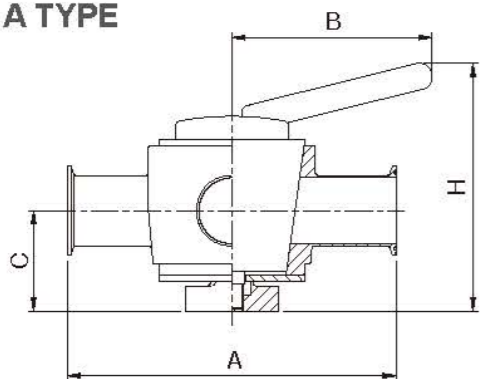
E TYPE



2WAY & 3WAY-PLUG VALVE for Weld/- Male/Female/Clamp

SIZE (Tube O.D)	Weld A	Male A	Clamp A	B	C
DN25 - 1"	66.3	95.3	94.9	26	139.19
DN40 - 1.5"	85.1	118.1	113.7	35	139.19
DN50 - 2"	114.2	149.2	142.8	45	143.01
DN65 - 2.5"	132.0	172.0	160.6	55	143.69
DN80 - 3"	168.6	213.6	197.2	70	143.81
DN100 - 4"	206.3	260.3	234.9	75	174.21

A TYPE

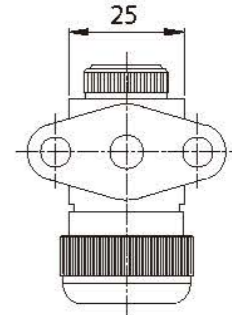
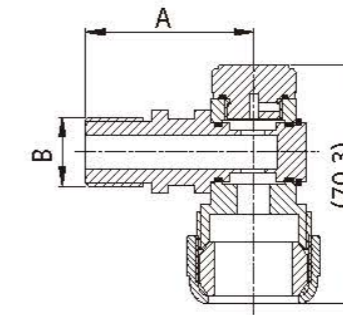


2WAY & 3WAY-PLUG VALVE for Weld/- Male/Female/Clamp

SIZE (Tube O.D)	Weld A	Clamp A	B	C	H
1"	184.2	115.9	117.0	58.3	128.4
1.5"	198.4	147.6	142.7	61.0	164.4
2"	223.8	173.0	144.2	72.4	178.0
2.5"	260.4	209.6	150.6	86.2	223.4
3"	290.5	239.7	180.7	90.6	241.4

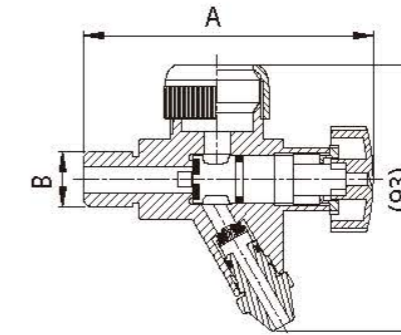
CSE Sample Cock Valve

Upper Valve



Type	A	B
16AMP	51	ø50.5
Ferrule	66.4	ø50.5
Male	51	1/2"-PF
Flange	52.6	60x29

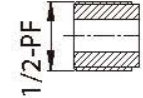
Level Valve



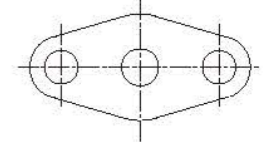
Type	A	B
16AMP	81.8	ø50.5
Ferrule	95.2	ø50.5
Male	109	1/2"-PF
Flange	81.5	60x29

Connecting End

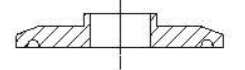
(1) PF Thread End



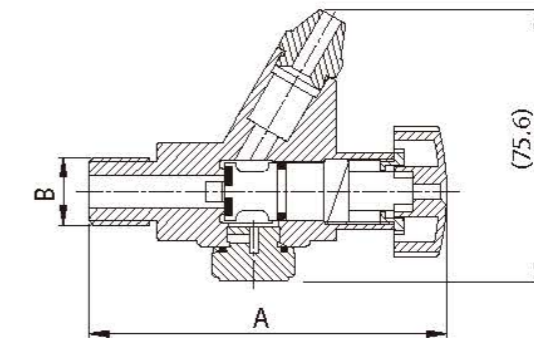
(2) Welding Flange End



(2) Welding Ferrule End



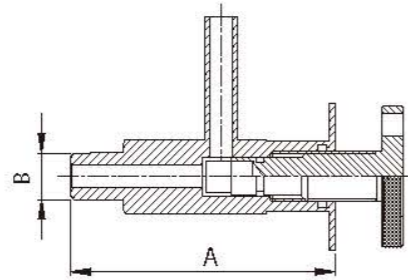
Test Valve



Type	A	B
16AMP	81.8	ø50.5
Ferrule	95.33	ø50.5
Male	109	1/2"-PF
Flange	81.5	60x29

CSE Sample Cock Valve

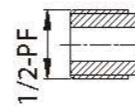
A Type



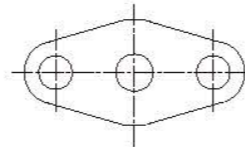
Type	A	B
16AMP	66.4	ø50.5
Ferrule	79.9	ø50.5
Male	75	1/4 NPT 3/8 NPT 1/2 NPT
Flange	81.5	60x29

Connecting End

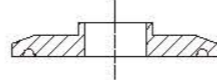
(1) PF Thread End



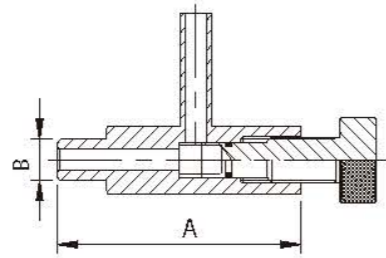
(2) Welding Flange End



(2) Welding Ferrule End

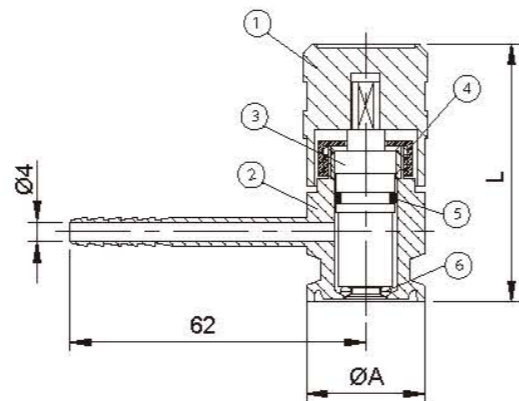


B Type



Type	A	B
16AMP	(82)	ø50.5/ø64
Ferrule	(90.6)	ø25
Male	(91.9)	1/4 NPT 3/8 NPT 1/2 NPT

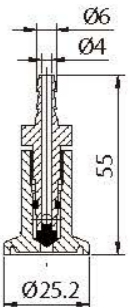
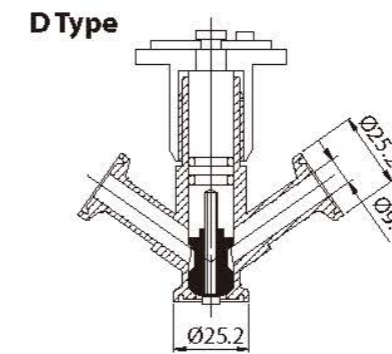
C Type



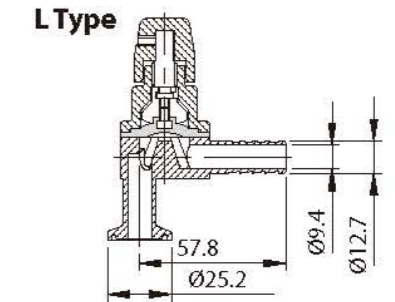
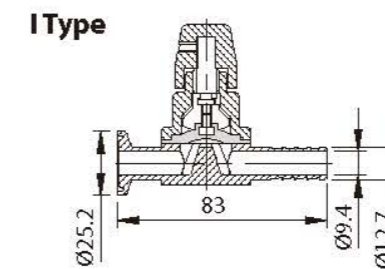
Item	PART NAME	Q'TY	MATERIAL
1	Rotating Nut	1	POM
2	Body	1	SUS304/316(L)
3	Flow support	1	SUS304/316(L)
4	Locknut	1	SUS304/316(L)
5	O-Ring	1	EPDM
6	O-Ring	1	EPDM

SIZE	ØA	L
1/2"	25.2	70
1"	50.5	70

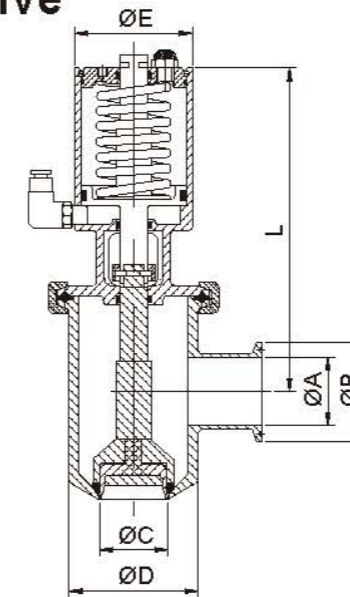
CSE Sample Cock Valve



CSE Diaphragm Sample Valve

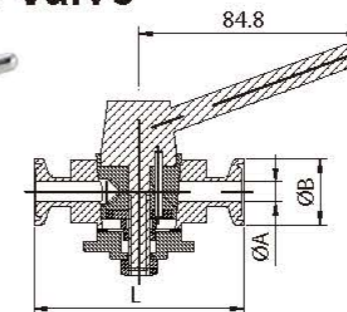


CSE Filling Valve



SIZE	ØA	ØB	ØC	ØD	ØE	L
1"x1"	22.1	50.5	22.1	55	60	165
1"x1.5"	34.8	50.5	22.1	55	60	165
1"x2"	47.5	64	22.1	66	85	292
1.5"x1.5"	34.8	50.5	34.8	66	60	165
1.5"x2"	47.5	64	34.8	66	85	292

CSE Four-way Valve



SIZE	ØA	ØB	L
3/8"	7.8	25.2	80
1/2"	9.4	25.2	80
3/4"	15.8	25.2	80

CSE Hygienic Sample Valve for BPE

DA Type

DB Type

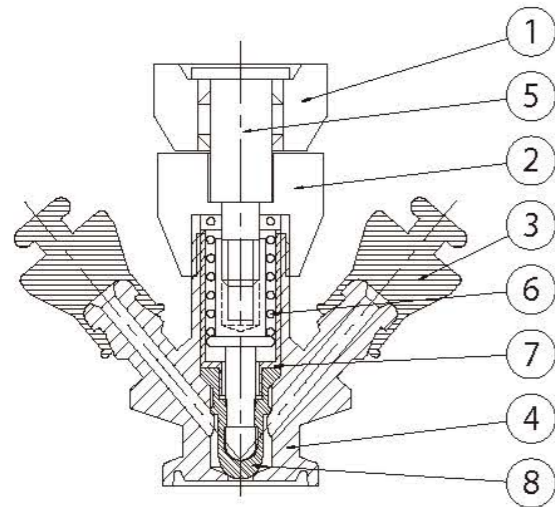


Materials:

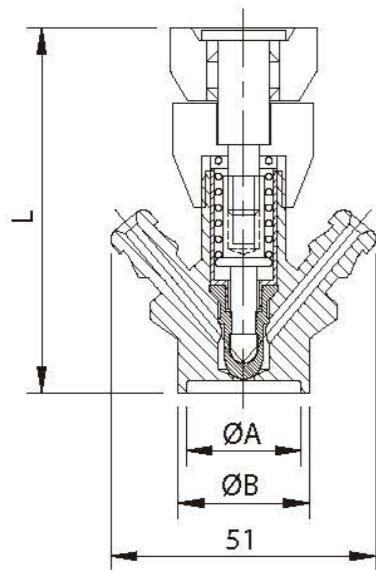
- Flow area: AISI 316L
- Other steel parts: AISI 316
- Plug stem: AISI 316L
- Gasket for flow area: EPDM/ Silicon/ FKM

Technical data:

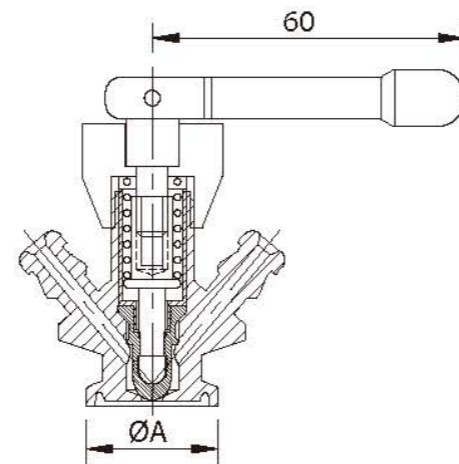
- Temperature range: Full vacuum. -10°C to +140°C(EPDM).



Parts List			
Item	Parts name	QTY	Material
1	Rotating Nut	1	SUS304/316(L)
2	Lucknut	1	SUS304/316(L)
3	Seal	1	EPDM
4	Body	1	SUS304/316(L)
5	Flow Supports	1	SUS304/316(L)
6	Spring	1	SUS304/316(L)
7	Bushing	1	SUS304/316(L)
8	Seal	1	EPDM

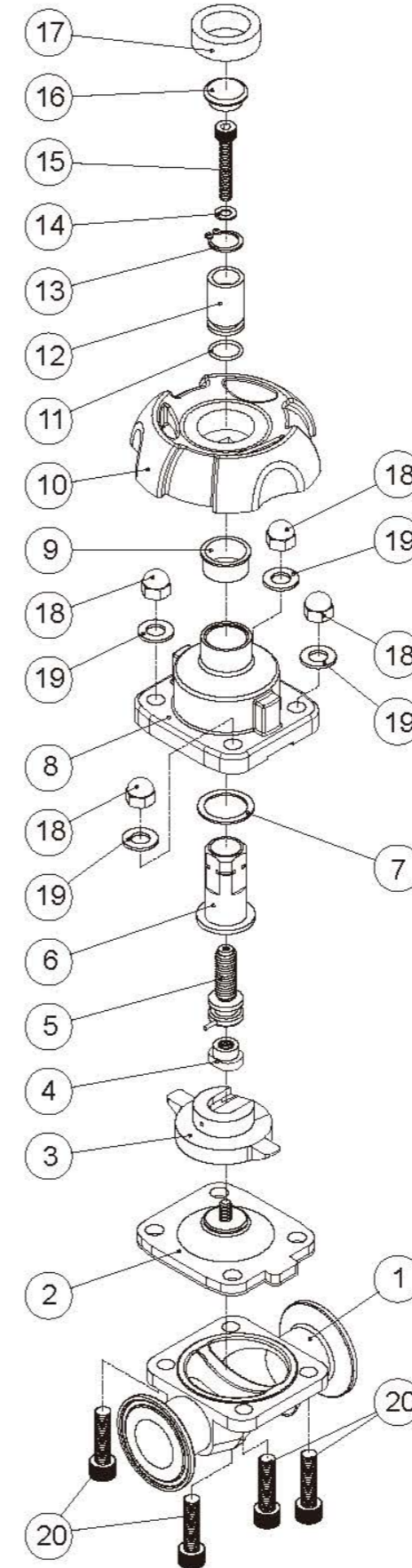


Weld			
SIZE	ØA	ØB	L
1/2"	9.4	12.7	71.5
3/4"	15.75	19.05	71.5
1.0"	22.1	25.4	71.5



Clamp			
SIZE	ØA	L	
A37	34	70	
1/2"	25.2	70	
3/4"	25.2	70	
1.0"	50.5	70	

Pneumatic/Manual Diaphragm Valve 2WAY/Tank Bottom Valve



Parts List			
Item	Parts name	QTY	Material
1	Body	1	SUS316L
2	Seal	1	EPDM+PTFE
3	Seat	1	SUS304
4	Screw	1	SUS304
5	Blot	1	SUS304
6	Blot sleeve	1	SUS304
7	Seal	1	PTFE
8	Bonnet	1	SUS304
9	sleeve	1	PEEK
10	Handwheel	1	EPDM+PTFE
11	O-Ring	1	NBR
12	Positioning index	1	MC(Blue)
13	Circlip	1	SUS304
14	Washer	1	SUS304
15	Screw	1	SUS304
16	Cover	1	MC(Blue)
17	CAP	1	EPDM+PTFE
18	Nut	4	SUS304
19	Washer	4	SUS304
20	Screw	4	SUS304

Material:

- Body: Forged/316L
- Diaphragm: EPDM+PTFE/NC or NO
- The seal of Diaphragm is exchangeable with GEMU

Connection:

- Clamp end/weld end

Body type:

- Direct connection (two way)/equal T/ reducing T/U-point.....

Operation:

- Normal open/normal close

Work temp:

- Diaphragm: EPDM+PTFE (-10°C~150°C)

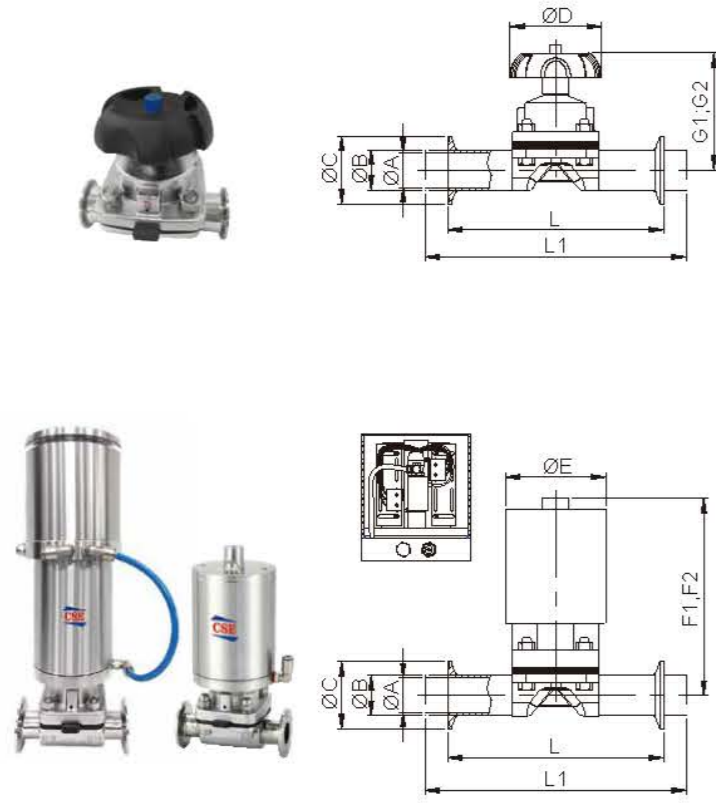
Work pressure:

- Max: 10 Bar

Surface:

- SF1: ID polished to $Ra \leq 0.5\mu m$ / SF4: EP finished to $Ra \leq 0.38\mu m$ / ID/OD mirror polished & ID $Ra \leq 0.5\mu m$ /OD sand blasted.....

Pneumatic/Manual Diaphragm Valve 2WAY



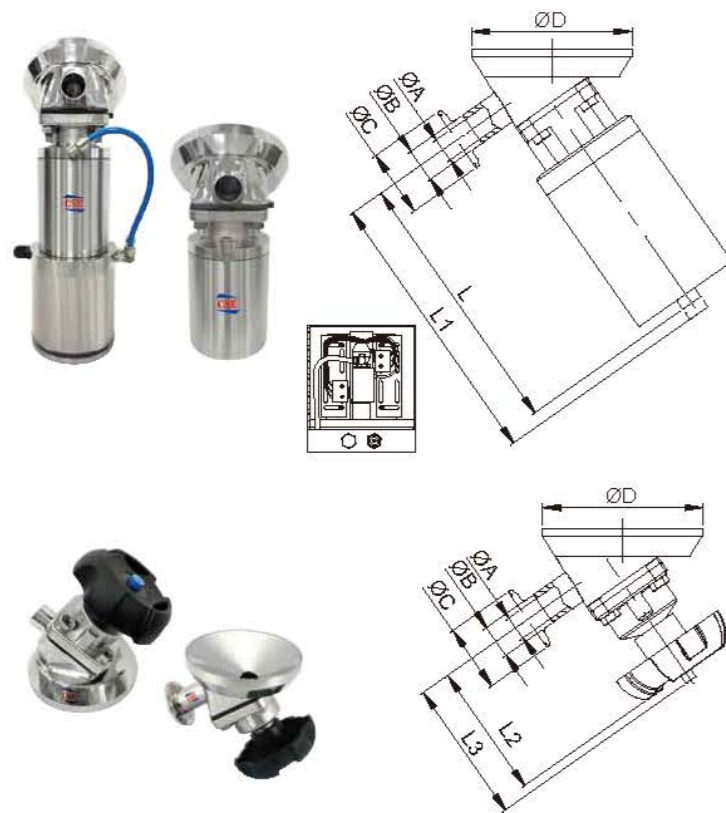
3A/BPE

SIZE	1/2"	3/4"	1"	1.5"	2"
ØA	9.4	15.75	22.1	34.8	47.5
ØB	12.7	19.05	25.4	38.1	50.8
ØC-3A	25	25	50.5	50.5	64
ØC-BPE	25	25	25/50.39	50.39	63.91
ØD	60	60	95	95	118
ØE	60	60	85	85	133
F1	122	122	212	217	315
F2	131	131	225	232	333
G1	74	74	100	119	135
G2	83	83	113	134	153
L	88.9	101.6	114.3	139.7	158.8
L1	124	135	141.2	168.4	190.5

DIN

DIN	DN10	DN20	DN25	DN32	DN40	DN50
ØA	10	20	26	32	38	50
ØB	13	23	29	35	41	53
ØC	34	34	50.5	50.5	50.5	64
ØD	—	60	60	95	95	118
ØE	60	85	85	85	85	133
F1	122	212	212	217	217	315
F2	131	225	225	232	232	333
G1	74	100	100	119	119	135
G2	83	113	113	134	134	153
L	88.9	101.6	114.3	139.7	139.7	158.8
L1	124	135	141.2	168.4	168.4	190.5

Tank Bottom Valve



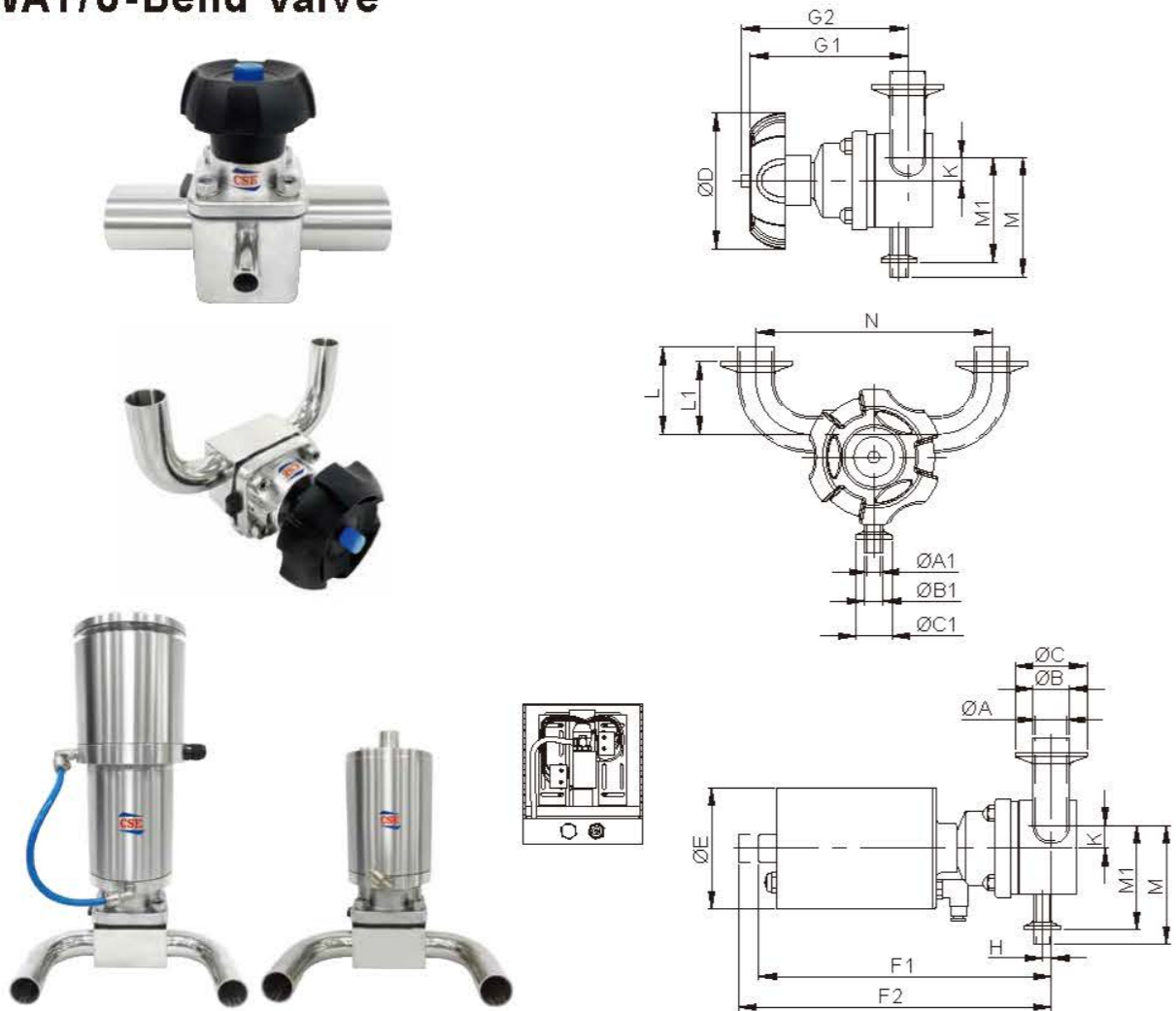
SIZE	1/2"	3/4"	1"	1.5"	2"
ØA	9.4	15.75	22.1	34.8	47.5
ØB	12.7	19.05	25.4	38.1	50.8
ØC	25	25	50.5	50.5	64
ØD	100	100	120	160	160
L	122	122	212	217	315
L1	131	131	225	232	333
L2	74	74	100	119	135
L3	83	83	113	134	153

Pneumatic/Manual Diaphragm Valve T-TYPE 3WAY



SIZE	1/2"x1/2"	1/2"x3/4"	1/2"x1"	1/2"x1.5"	1/2"x2"	3/4"x3/4"	3/4"x1"	3/4"x1.5"	3/4"x2"	1"x1"	1"x1.5"	1"x2"	1.5"x1.5"	1.5"x2"	2"x2"
ØA	9.4	15.75	22.1	34.8	47.5	15.75	22.1	34.8	47.5	22.1	34.8	47.5	34.8	47.5	47.5
ØB	12.7	19.05	25.4	38.1	50.8	19.05	25.4	38.1	50.8	25.4	38.1	50.8	38.1	50.8	50.8
ØC	25	25	50.5	50.5	64	25	50.5	50.5	64	50.5	50.5	64	50.5	64	64
ØA1	9.4	9.4	9.4	9.4	9.4	15.75	15.75	15.75	15.75	22.1	22.1	22.1	34.8	34.8	47.5
ØB1	12.7	12.7	12.7	12.7	12.7	19.05	19.05	19.05	19.05	25.4	25.4	25.4	38.1	38.1	50.8
ØC1	25	25	25	25	25	25	25	25	25	50.5	50.5	50.5	50.5	50.5	64
ØD	60	60	60	60	60	60	60	60	60	95	95	95	95	95	118
ØE	60	60	60	60	60	60	60	60	60	85	85	85	85	85	133
F1	122	122	122	122	122	122	122	122	122	212	212	212	217	217	315
F2	131	131	131	131	131	131	131	131	131	225	225	225	232	232	333
G1	74	74	74	74	74	74	74	74	74	100	100	100	119	119	135
G2	83	83	83	83	83	83	83	83	83	113	113	113	134	134	153
H	—	6.18	13.2	19.5	19.5	4.5	10.7	17.5	17.5	6.2	14.5	18.4	6.2	13.7	—
K	6.8	9.98	13.15	19.5	25.85	9.98	13.15	19.5	25.85	16.05	22.4	28.75	22.4	28.75	28.75
L	139.7	139.7	154	153.6	153.6	139.7	153.6	153.6	153.6	172.6	172.6	172.6	197.6	197.6	211.6
L1	88.9	88.9	114.3	114.3	114.3	88.9	114.3	114.3	114.3	114.3	114.3	114.3	139.7	139.7	158.8
M	69.4	72.58	75.75	82.1	88.45	72.58	75.75	82.1	88.45	86.65	93	99.35	105	111.35	123.75
M1	51	54.18	57.35	63.7	70.05	54.18	57.35	63.7	70.05	70.6	74.6	80.95	86.6	92.95	98.95

Pneumatic/Manual Diaphragm Valve 3WAY/U-Bend Valve

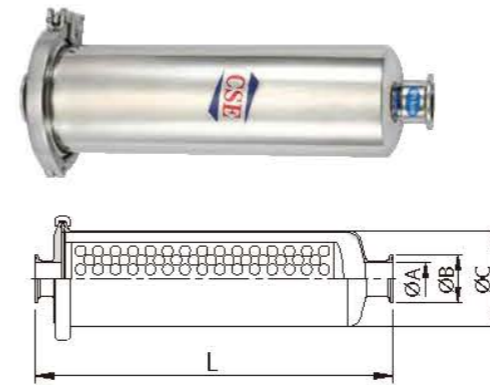


SIZE	1/2"x1/2"	3/4"x1/2"	1"x1/2"	1.5"x1/2"	2"x1/2"	3/4"x3/4"	1"x3/4"	1.5"x3/4"	2"x3/4"	1"x1"	1.5"x1"	2"x1"	1.5"x1.5"	2"x1.5"	2"x2"
ØA	94	15.75	22.1	34.8	47.5	15.75	22.1	34.8	47.5	22.1	34.8	47.5	34.8	47.5	47.5
ØB	12.7	19.05	25.4	38.1	50.8	19.05	25.4	38.1	50.8	25.4	38.1	50.8	38.1	50.8	50.8
ØC	25	25	50.5	50.5	64	25	50.5	50.5	64	50.5	50.5	64	50.5	64	64
ØA1	9.4	9.4	9.4	9.4	9.4	15.75	15.75	15.75	15.75	22.1	22.1	22.1	34.8	34.8	47.5
ØB1	12.7	12.7	12.7	12.7	12.7	19.05	19.05	19.05	19.05	25.4	25.4	25.4	38.1	38.1	50.8
ØC1	25	25	25	25	25	25	25	25	25	50.5	50.5	50.5	50.5	64	64
ØD	60	60	60	60	60	60	60	60	60	95	95	95	95	95	118
ØE	60	60	60	60	60	60	60	60	60	85	85	85	85	85	133
F1	122	122	122	122	122	122	122	122	122	212	212	212	217	217	315
F2	131	131	131	131	131	131	131	131	131	225	225	225	232	232	333
G1	74	74	74	74	74	74	74	74	74	100	100	100	119	119	135
G2	83	83	83	83	83	83	83	83	83	113	113	113	134	134	153
H	—	6.18	13.44	19.5	19.5	4.5	10.7	17.5	17.5	6.2	14.5	18.4	6.2	13.7	—
K	6.8	9.98	13.15	19.5	25.85	9.98	13.15	19.5	25.85	16.05	22.4	28.75	22.4	28.75	28.75
L	57.15	66.68	76.2	95.3	120.7	66.68	76.2	95.3	120.7	76.2	95.3	120.7	95.3	120.7	120.7
L1	31.75	41.25	50.8	69.9	88.9	41.28	50.8	69.9	88.9	50.8	69.9	88.9	69.9	88.9	88.9
M	69.4	72.85	75.75	82.1	88.45	72.58	72.75	82.1	88.45	70.6	93	99.35	105	111.35	123.75
M1	51	54.18	57.35	63.7	70.05	54.18	57.35	63.7	70.05	68.25	74.6	80.95	86.6	92.95	98.95
N	101.7	120.7	165.1	203.3	241.3	120.7	165.1	203.3	241.3	165.1	203.3	241.3	228.7	266.7	285.8

CSE S-TRAINERS

- Material: SUS304/SUS316L
- Mesh: 20~400
- Aperture Size: 1~10(mm)
- P.D.Press(MPa): 0.05~0.2
- Types: Weld end/ Clamp end/ Male end/ Female end

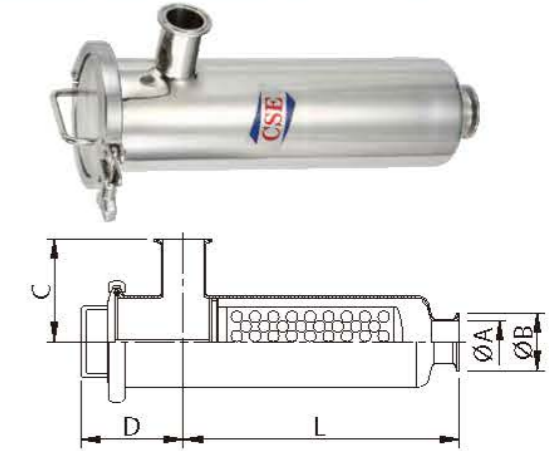
INLINE STRAINER I TYPE



STRAINER INLINE TYPE (I)

SIZE	ØA	ØB	ØC	L
1.0"	22.2	50.5	101.6	380
1.5"	34.8	50.5	101.6	380
2.0"	47.5	64	101.6	380
2.5"	60.2	77.5	101.6	450
3.0"	72.9	91	101.6	550

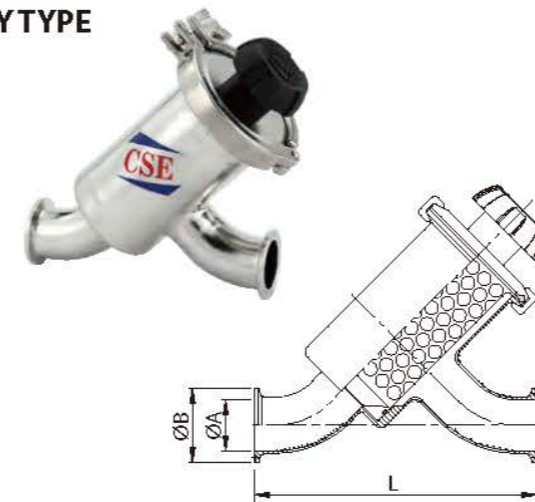
SIDE OUTLET STRAINER L TYPE



STRAINER SIDE OUTLET TYPE (L)

SIZE	ØA	ØB	C	D	L
1"	22.1	50.5	104.8	110	310
1.5"	34.8	50.5	104.8	110	310
2"	47.5	64	114.3	110	310
2.5"	60.2	77.5	108	110	410
3"	72.9	91	108	110	490

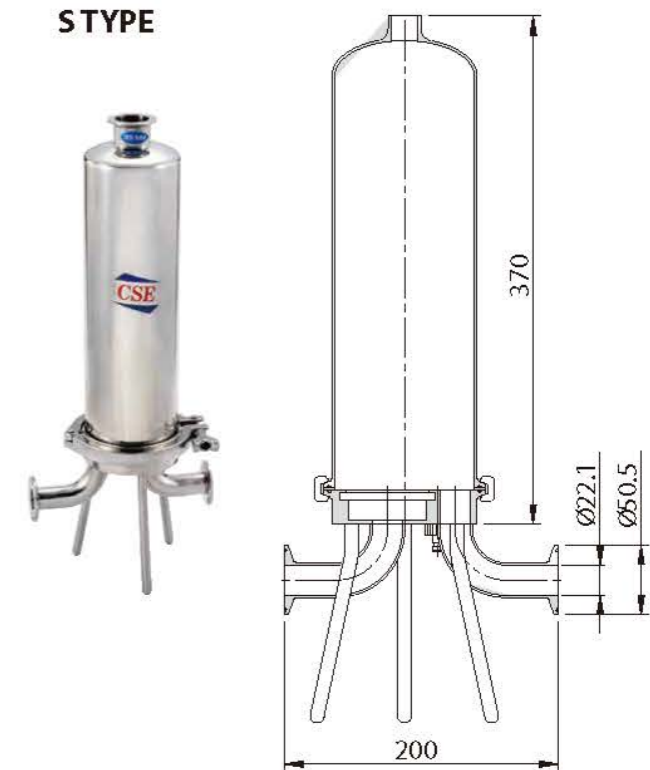
Y TYPE



STRAINER Y TYPE

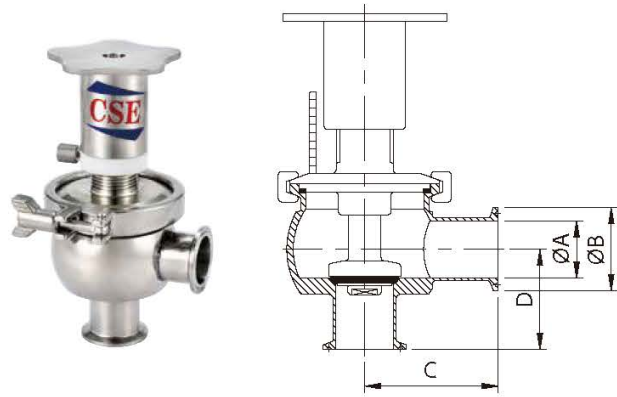
SIZE	ØA	ØB	L
1.0"	22.1	50.5	155.65
1.5"	34.8	50.5	192.63
2.0"	47.5	64	208.17
2.5"	60.2	77.5	271.26
3.0"	72.9	91	300.83

STYPE



CSE Kinds of Special Valve

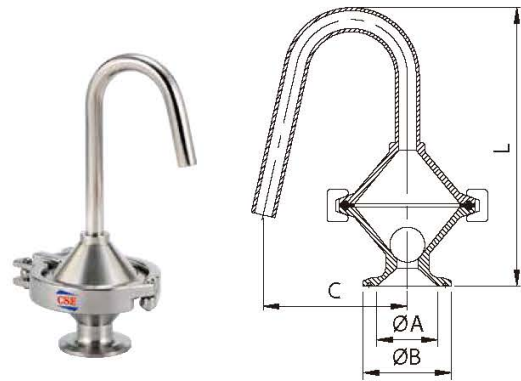
- Material: SUS304 or SUS316L.
Forged or Solid Bar Body.
- Surface: Polished, Electric Polished.
ID Ra<0.8µm. or 0.4µm.
- Can be made by your requirement design.



For your safety relief poessure.
(Working pressure-0.1~7kgs/cm².)

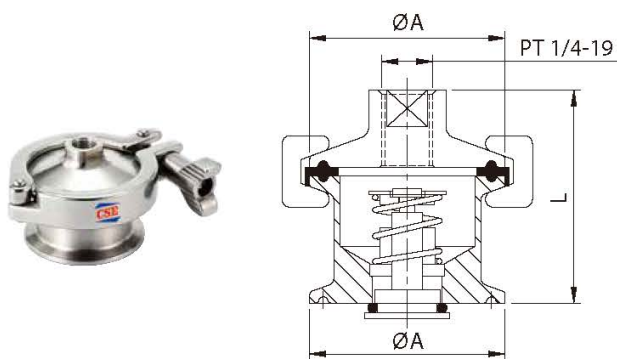
Relief Valve

SIZE	ØA	ØB	C	D
1.0"	22.1	50.5	63.5	63.5
1.5"	34.8	50.5	69.85	69.85
2.0"	47.5	64	88.9	88.9
2.5"	60.2	77.5	88.9	88.9
3.0"	60.2	91	95.25	95.25



Relief out over-load Air pressure on your Tank or Pipe Line.
Air Release Valve

SIZE	ØA	ØB	C	L
1.0"	22.1	50.5	82	158
1.5"	34.8	50.5	82	158
2.0"	47.5	64	82	158



For Air Clean out the pipe Line.
Air Blow Valve

SIZE	ØA	L
1.0"	50.5	55
1.5"	50.5	55
2.0"	64	55

CSE OEM series valves



(Mf) Membrane Filter

Mini-filter

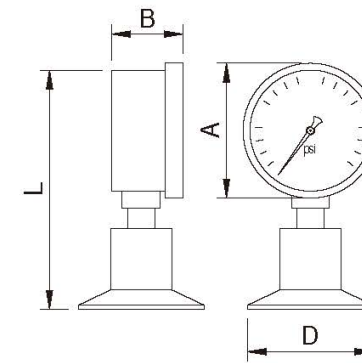
Filling Valve

Steam Trap

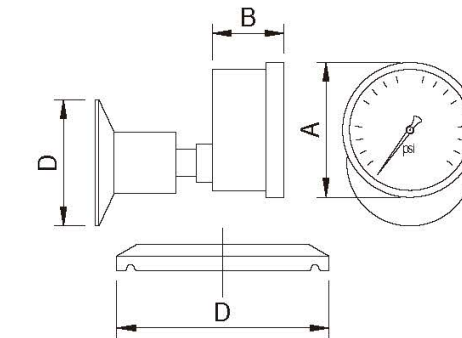
Sanitary Standard Pressure Gauge

Note:

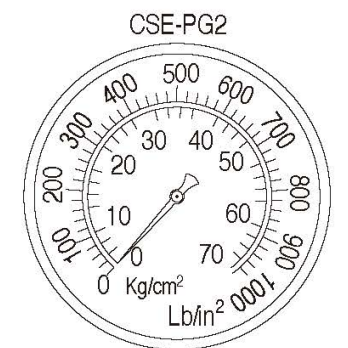
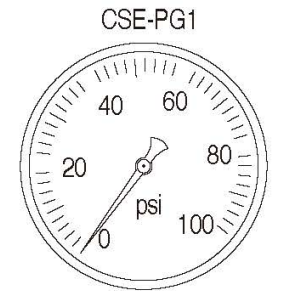
Sanitary pressure gauges are stainless steel products specifically designed to meet the demanding sanitary requirements for food dairy, beverage, pharmaceutical and biotech applications. Complies with 3A sanitary standard, water-proof, shock resistant, and closed structures are durable and accurate, good for long time running. All series are liquid-filled, special materials movement and bourdon tube have lasting durability. It is applicable to the places of both strong fluctuation and non-corrosive fluid, such as air, water and oil.



SIZE	A	B	L
Ø50	56	30	100
Ø63	69	30	122
Ø80	89	30	140
Ø100	112	47	166
Ø160	160	50	224



SIZE	D (Tri-clamp)
1.0"	50.5
1.5"	50.5
2.0"	64
2.5"	77.5
3.0"	91
4.0"	119

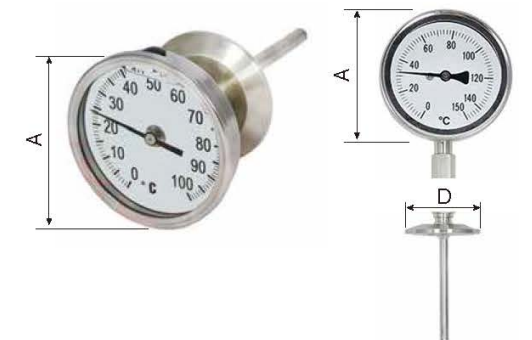


- Process connection : 1-1/2", 2.0", 2-1/2"
Quick-release clamp piping system
- Suitable Pressure Ranges : 15psi to 600psi
- Instrument Connection : 1/4"NPT /BSPT or 1/2"NPT /BSPT
- Case & Movement Material : SS304
- Connection Material : SUS316L
- Diaphragm Material : SUS316L
- Fill Fluid : Glycerined (Vegetable oil)
- Bourdon Tube Material : SUS316L
- Ferrule Material : SUS304/SUS316L
- Lens : Safety Glass
- Max temperature : tandard-120°C , special-150°C

Thermometer

CSE-TM-T

CSE-TM-I



- Process connection : 1-1/2" ~ 4"
Quick-release clamp piping system
- Case & Movement Material : SS304
- Ferrule Material : SS304/ SUS316
- Lens : Safety Glass