



CSE Automatic or Manual Butterfly Valve

Concept 概念：

The butterfly valve is a simple regulating valve. The butterfly valve that can be used for the on-off control of low-pressure pipeline media refers to a valve whose closing part (disc or butterfly) is a disc, which rotates around the valve shaft to achieve opening and closing. It mainly plays the role of cutting off and throttling on the pipeline. The butterfly valve opening and closing part is a disc-shaped butterfly plate, which rotates around its own axis in the valve body to achieve the purpose of opening and closing or adjustment.

蝶閥是一種結構簡單的調節閥，可用於低壓管道介質的開關控制的蝶閥是指關閉件（閥瓣或蝶片）為圓盤，圍繞閥軸旋轉來達到開啟與關閉的一種閥。在管道上主要起切斷和節流作用。蝶閥啟閉件是一個圓盤形的蝶板，在閥體內繞其自身的軸線旋轉，從而達到啟閉或調節的目的。

Working principle 工作準則：

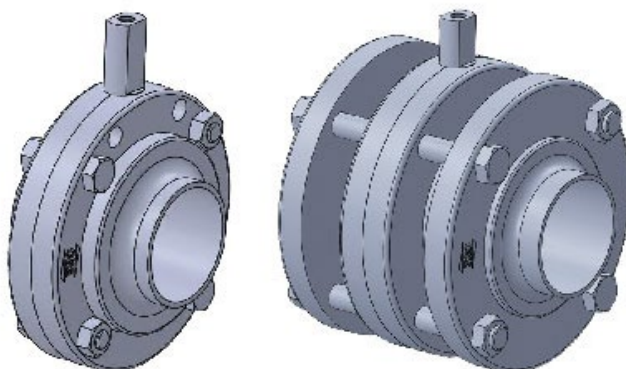
The butterfly valve is a valve that uses a disc-type opening and closing member to reciprocate about 90° to open, close or adjust the flow of the medium. The butterfly valve is not only simple in structure, small in size, light in weight, low in material consumption, small in installation size, small in driving torque, simple and fast in operation, but also has good flow regulation and closing and sealing characteristics at the same time. It has been developed in the past ten years. One of the fastest valve varieties. The use of butterfly valves is very extensive. The variety and number of its use continues to expand, and it is developing towards high temperature, high pressure, large diameter, high sealing performance, long life, excellent adjustment characteristics, and one valve with multiple functions. Its reliability and other performance indicators have reached a high level.

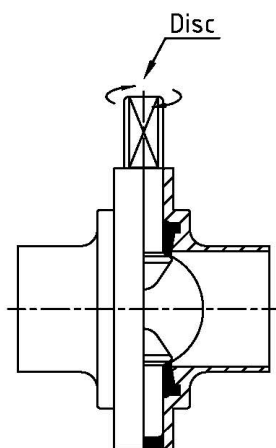
蝶閥是用圓盤式啟閉件往復迴轉 90°左右來開啟、關閉或調節介質流量的一種閥門。蝶閥不僅結構簡單、體積小、重量輕、材料耗用省、安裝尺寸小、驅動力矩小、操作簡便、迅速，並且還可以同時具有良好的流量調節功能和關閉密封特性，是近十幾年來發展最快的閥門品種之一。蝶閥的使用非常廣泛。其使用的品種和數量仍在繼續擴大，並向高溫、高壓、大口徑、高密封性、長壽命、優良的調節特性，以及一閥多功能發展。其可靠性及其他性能指標均達到較高水平。

Standard design 標準設計：

Mainly composed of valve body, valve stem, butterfly plate and oil seal. The valve body is cylindrical with short axial length and built-in discs.

主要由閥體、閥桿、蝶片和油封組成。閥體呈圓筒形，軸向長度短，內置蝶片。





Surface Finish :

ID $Ra \leq 0.8 \mu m$ (32 μin) , OD $Ra \leq 1.6 \mu m$ (63 μin) , by Machining Finish .
ID $Ra \leq 0.51 \mu m$ (20 μin) , OD $Ra \leq 1.6 \mu m$ (63 μin) , by Electrical Polish .

Instruction :

- 1, Butterfly valve can be equipped with manual handle design or pneumatic control to open and close.
- 2, Manual handle design and pneumatic type can be interchangeable.
- 3, The volume of the fluid can be adjustable through different manual angle controls.

TECHNICAL DATA 技術數據

Valve

Max. product pressure : 1000 kPa (10 bar)
Min. product pressure : Full vacuum
Temperature range : $10^{\circ}C$ to $+95^{\circ}C$
max. temperature if val

Actuator 汽動頭

Max. air pressure: 700 kPa (7 bar)
Min. air pressure, NC and NO: 400 kPa (4 bar)

Temperature range: $-25^{\circ}C$ to $+90^{\circ}C$

Air consumption (litres free air) - $\varnothing 85$

mm: $0.24 \times p$ (bar)

Air consumption (litres free air) - $\varnothing 133$

mm: $0.95 \times p$ (bar)

Weight: - $\varnothing 85$ mm: 3 kg

- $\varnothing 133$ mm: 12 kg

PHYSICAL DATA 物理數據

Valve bodies

duct wetted steel parts 1.4301 ((304) or 1.4404 (316L)

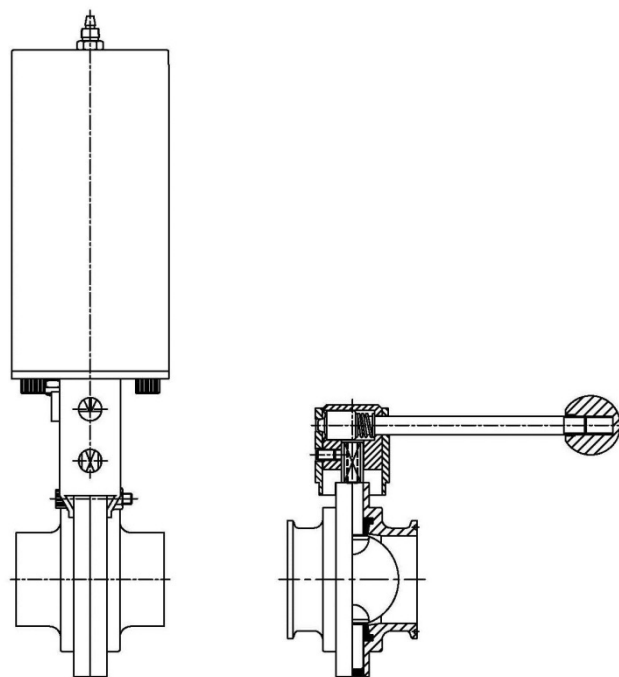
Disc:..... 1.4301 (304) or 1.4404 (316L)

Other steel parts:..... 1.4301 (304)

Rubber grades: Q, EPDM, FPM, HNBR or PFA

Bushes for valve disc:..... PVDF

Finish: Semi-bright



Actuator 汽動頭

Actuator body: 1.4307 (304L)

Piston:..... Light alloy (for $\varnothing 85$ mm Bronze) Air/air version

Seals:..... NBR

Standard design 設計標準

Butterfly valve is available in three versions clamp end 、weld end 、male end, for 3A 、BS 、DIN 、SMS 、RJT 、

IDF tubes.

The valve consists of two valve body halves, valve disc, bushes for the disc stem and seal ring.

The valve is assembled by means of screws and nuts.

The actuator is fitted onto the valve by means of a bracket and screws. (The actuator can also be fitted onto ball valves by means of special brackets).

The handle for manual operation is fitted onto the valve by means of a cap/block system and a screw.

The valve has welding ends as standard, also be supplied with fittings.

蝶閥有三種版本夾式、焊式、牙口，用於 3A、BS、DIN、SMS、RJT、IDF 管。

該閥由兩個閥體半部，閥盤，用於盤閥桿和密封環的襯套組成。 閥門通過螺釘和螺母組裝。

致動器通過支架和螺釘安裝在閥上。(執行器也可以通過特殊支架安裝在球閥上)。

用於手動操作的手柄通過蓋/塊系統和螺釘安裝到閥上。

該閥具有標準焊接端，也可提供配件。

Note!

For further details, see also ESE02446.

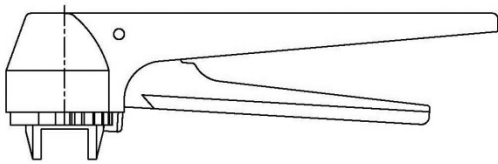


Fig. Lockable Multiposition Handle with padlock. . Padlock 可鎖定多功能把手。 掛鎖

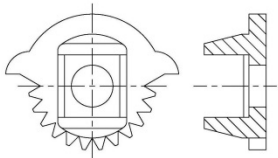
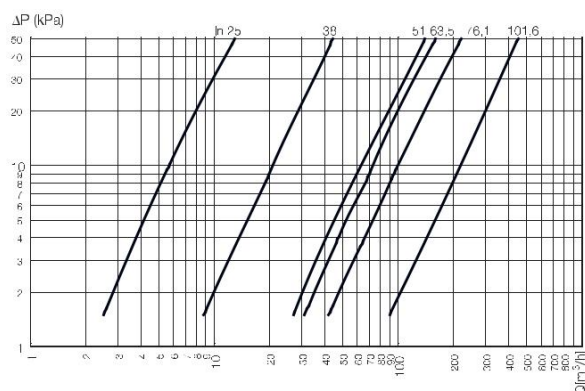


Fig. . Positioning cap

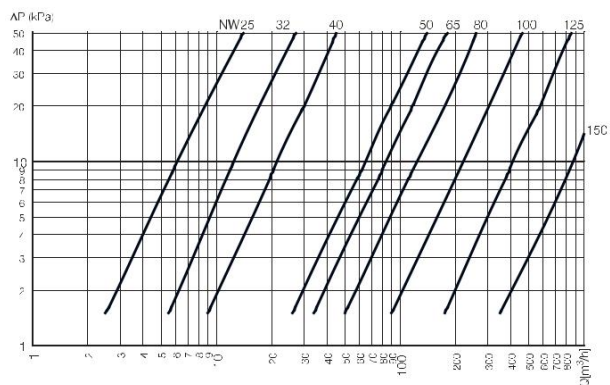
1. On/Off

2. Multi positioning

Capacity/Pressure drop diagrams 容量/壓降圖



LKB and LKB-F fully open



LKB-2 and LKB-F fully open

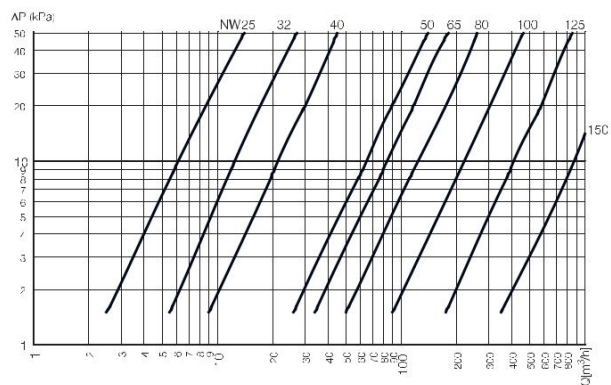
NOTE!

For the diagrams the following applies: 對於圖表適用

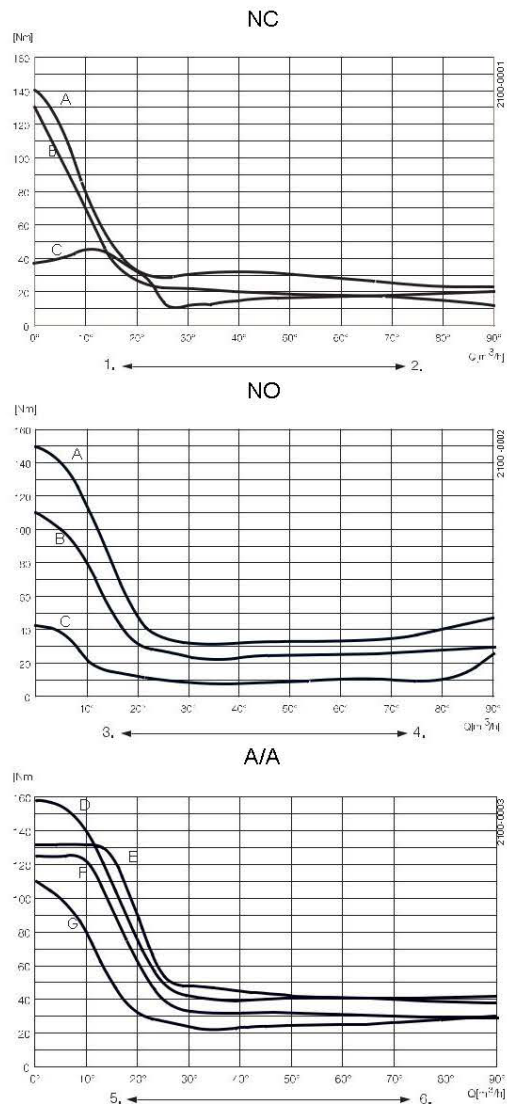
Medium: Water (20°C)(68°F) 介質：水 (20°C)(68°F)。

Measurement: In accordance with VDI 2173. 測量：符合 VDI 2173。

Torque diagrams - Actuator 扭矩圖 - 氣動頭



LKLA ø85 mm:



A = 6 bar air pressure

B = 5 bar air pressure

C = Closing/opening with spring

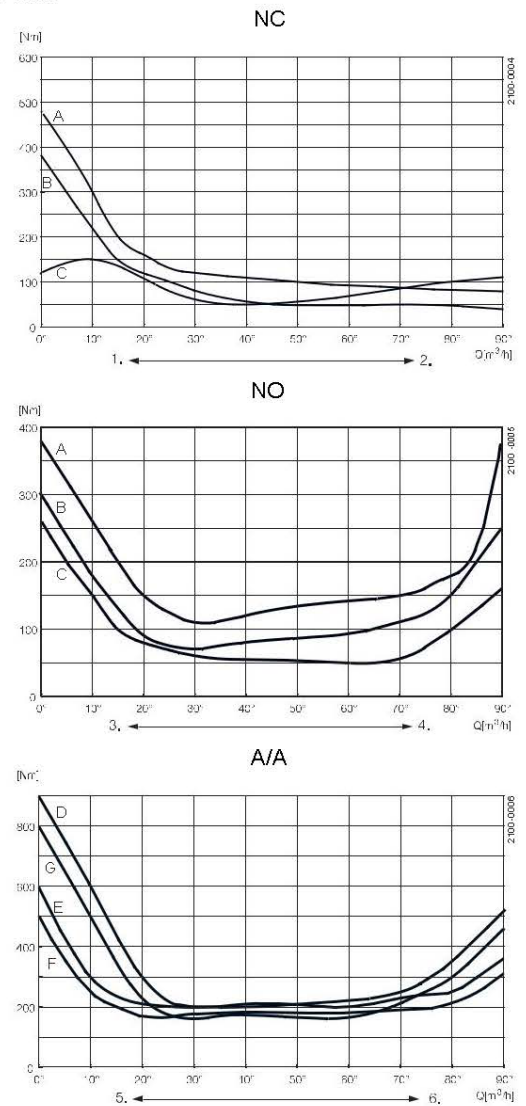
D = 6 bar air pressure connection on top

E = 6 bar air pressure connection on bottom

F = 5 bar air pressure connection on top

G = 5 bar air pressure connection on bottom

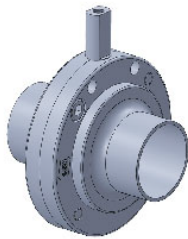
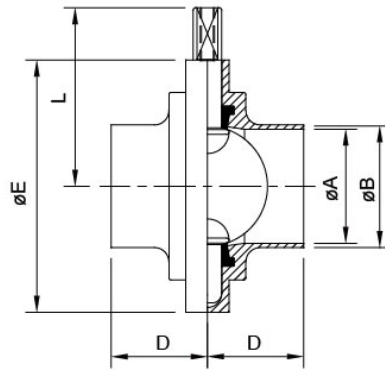
LKLA ø133 mm:



Angular motion of actuator:

1. Closing - Spring activated
2. Opening - Air activated
3. Closing - Air activated
4. Opening - Spring activated
5. Closing
6. Opening

Weld End



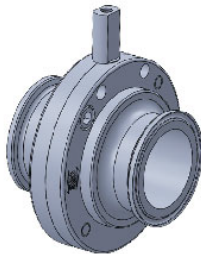
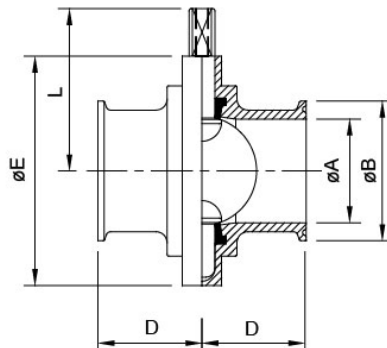
DIN WELD BUTTERFLY VALVE

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	66	70	41	125	84.8
DN80	81	85	81	85	42	137	91.6
DN100	97.6	101.6	97.6	101.6	44	157	101.75
	100	104	100	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

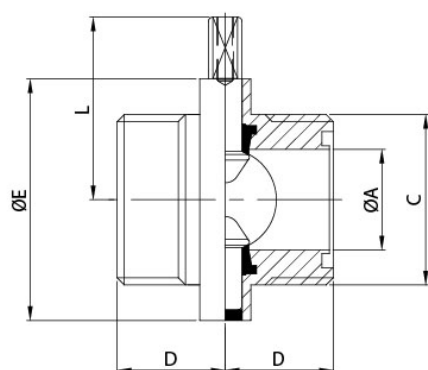
Clamp End



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"	72.9	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

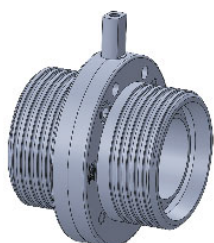
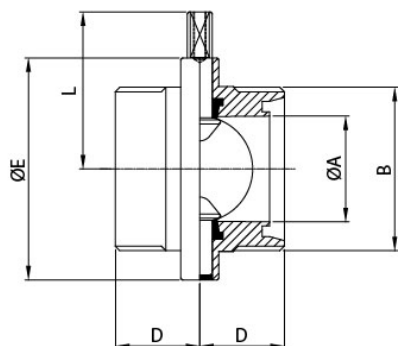
Male End



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

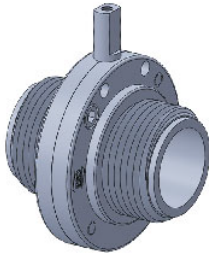
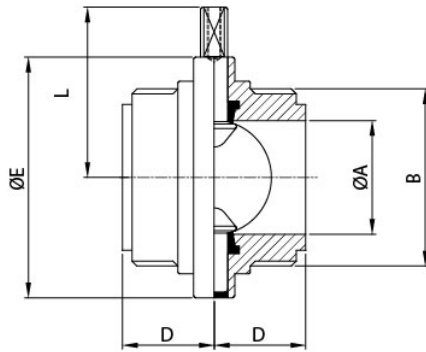
Male End



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

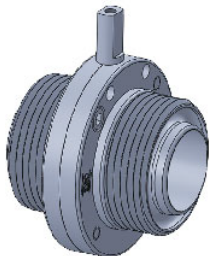
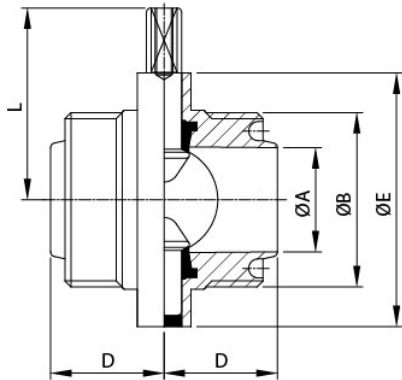
Male End



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

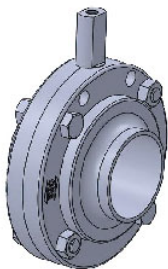
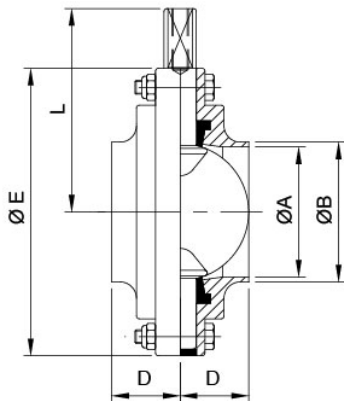
Male End



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

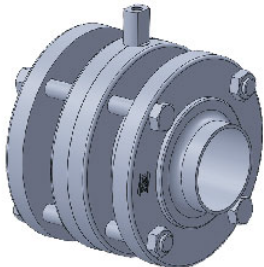
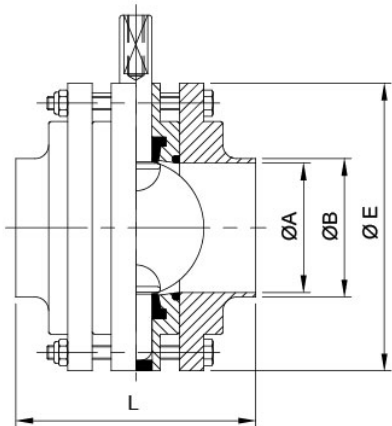
CSE G TYPE



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

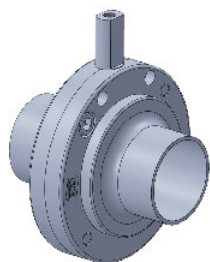
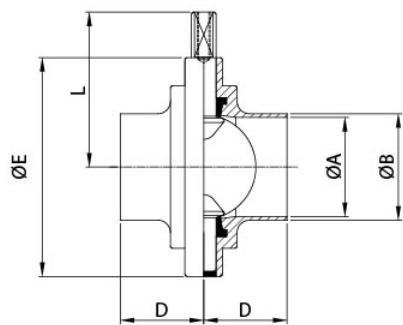
3 Piece G Type Butterfly Valves



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

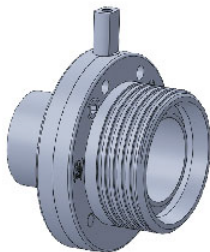
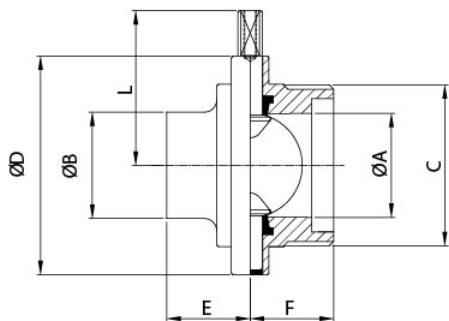
Macon Butterfly Valve



WINE WELD/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

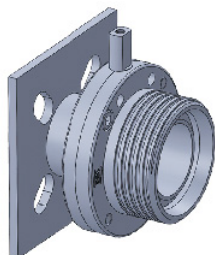
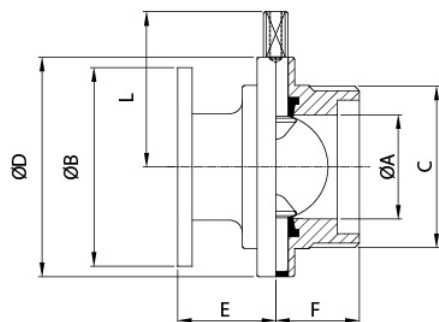
Macon Butterfly Valve



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

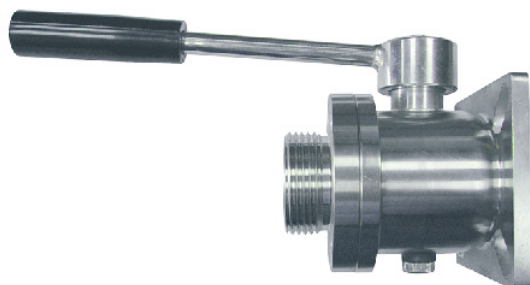
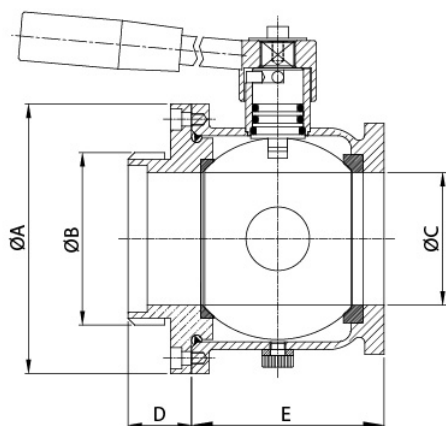
Macon Butterfly Valve



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