



## CSE Ball Valve

### **Concept 概念：**

Because glass has good transparency, it is used for various observation windows. The glass installed on these windows is called glass window. There are many types of glass windows, which can be divided into high temperature resistant glass windows, high pressure resistant glass windows, ordinary window glass, oil-free glass windows, etc. according to their usage conditions.

由於玻璃就有較好的透明度而被用於各種觀察窗口，這些窗口上的安裝的玻璃我們稱之為玻璃視窗。玻璃視窗的類別比較多，按其使用狀況可以分為，耐高溫玻璃視窗、耐高壓玻璃視窗、普通窗口玻璃、油任式玻璃視窗等。

### **Working principle 工作準則**

Glass window is a common chemical and food grade equipment accessory. It is a necessary device for observing various processes. It is widely used in equipment. Glass windows are generally composed of transparent parts and sealing parts. They are used in general non-high temperature and high pressure processes. Among them, the glass window is not difficult to realize, the transparent part can be made of ordinary inorganic glass or organic glass or strengthened glass as the material, and the sealing part can be made of rubber and other materials with certain elasticity as the material.

玻璃視窗是一種常見的化工及食品級設備配件，是觀察各種過程所必須的一種裝置，在設備上應用十分廣泛，玻璃視窗一般由透明件和密封件所構成，在一般的非高溫高壓的過程中，玻璃視窗並不難以實現，透明件可以選用普通的無機玻璃或有機玻璃或強化玻璃作為材料，密封件可以用橡膠等具有一定彈性的物質作為材料。

### **Standard design 標準設計：**

The glass windows are combined by upper and lower flanges and screws. The main feature of the oil-free glass window, which is different from ordinary glass windows, is that it is easier to disassemble and assemble.

玻璃視窗皆由上下法蘭及螺絲一併結合為一體。而另不同於一般玻璃視窗的為油任式玻璃視窗主要的地方為更容易拆裝。



### **Hygienic Sight Glass：**

Glass：Clean, High press pyrex glass. Max. work 10 bar. Can be changeable.

Body：AISI 304、316L precision machined body.

With width connection end. 3A、DIN、SMS、RJT、IDF

Male/Male、weld and female end.

Screw bolt：Full stainless steel.

Seal：EPDM、silicone and FKM.

### 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.

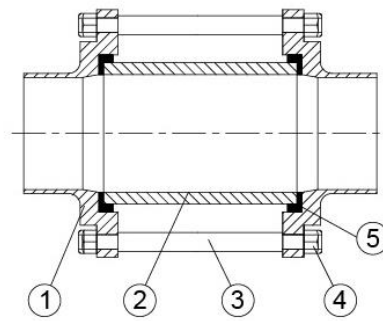
**Screw Blot:** Full Stainless Steel.

**Seal:** EPDM, Silicone and FKM.

### Pyrex Glass data:

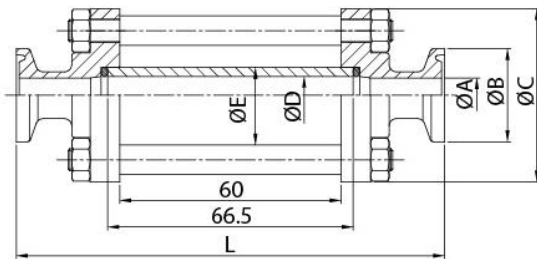
#### Pyrex Borosilicate Glass Composition

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



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

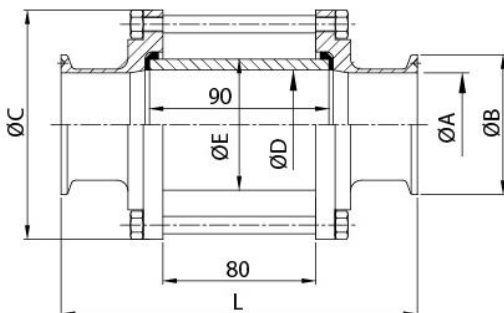
1/2"~3/4"



### 3A/BS CLAMP END SIGHT GLASS

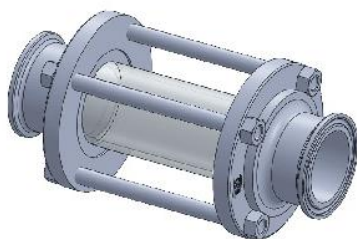
SIZE	ØA	ØB	ØC	ØD	ØE	L
1/2"	9.4	25.2	47	10.2	15	116
3/4"	15.75	25.2	47	17	22	116
1.0"	22.1	50.5	79	26	32	143
1.5"	34.8	50.5	85	34	40	146
2.0"	47.5	64	105	50	60	150
2.5"	60.2	77.5	112	65	75	150
3.0"	72.9	91	125	75.4	85	156
4.0"	97.6	119	157	100	110	156

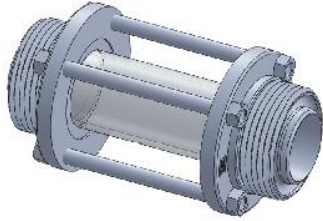
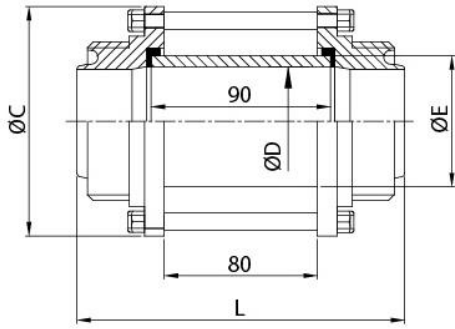
1"~4"



### SMS CLAMP END GIHT 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



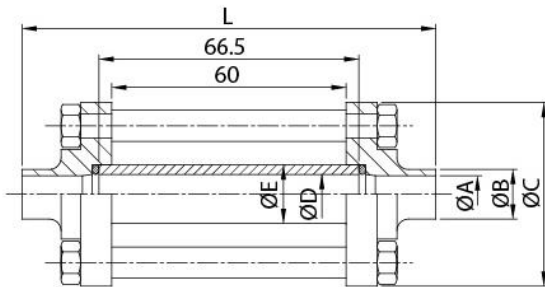


### RJT MALE END SIGHT GLASS

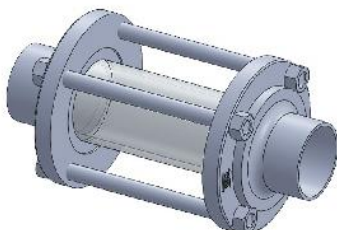
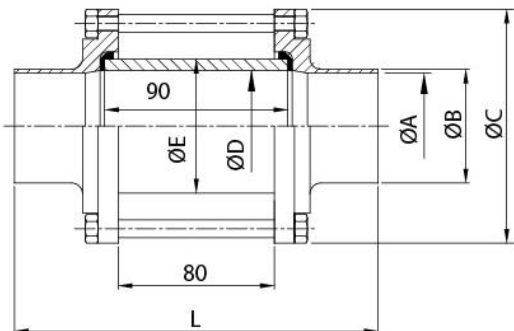
SIZE	ØC	ØD	ØE	L
25	79	26	32	148
38	85	34	40	156
50	105	50	60	160
63	112	65	75	160
76	125	75.4	85	162
100	157	100	110	168

(Can be requested for SMS/DIN/IDF)

1/2"~3/4"



1"~4"

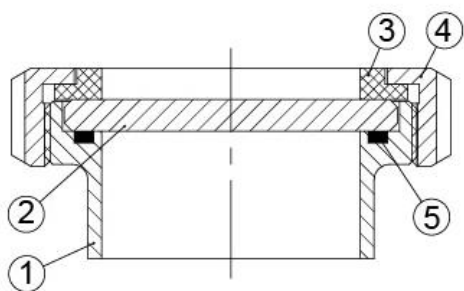


### 3A/BS WELD END SIGHT GLASS

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

### SMS WELD END GIHT GLASS

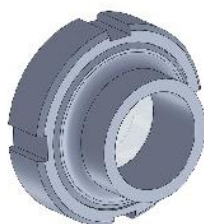
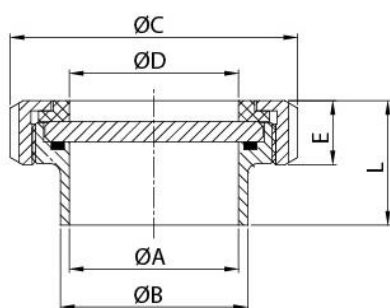
SIZE	ØA	ØB	ØC	ØD	ØE	L
DN25	22.5	25	79	26	32	148
DN38	35.4	38	85	34	40	156
DN50	48	51	105	50	60	160
DN63	60.2	63.5	112	65	75	160
DN76	72	76	125	75.4	85	162
DN100	100	104	157	100	110	168



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

With weld end only!

### UNION TYPE



### 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

### Precautions 注意事項：

- ① Strict cleaning treatment
- ② High temperature pretreatment
- ③ Padded the gasket
- ④ Try to avoid unnecessary hot and cold

- ① 嚴格清潔處理
- ② 高溫預處理
- ③ 墊好墊片
- ④ 盡量避免不必要的急冷急熱