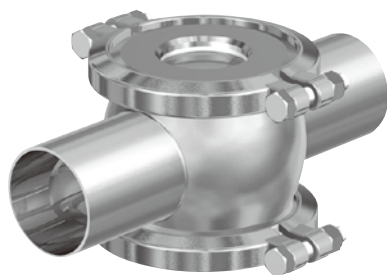
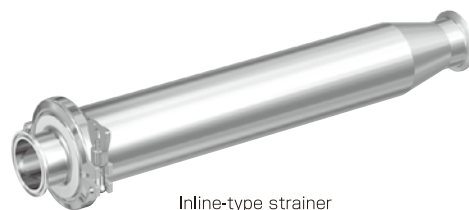


*Hygienic*  
**Auxiliaries**

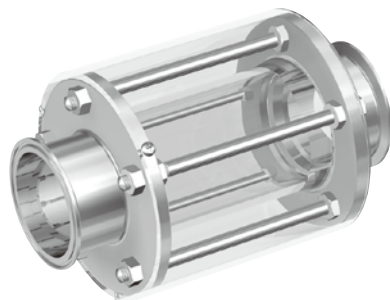




SQ-type sight glass



Inline-type strainer



Sight glass with protection cover

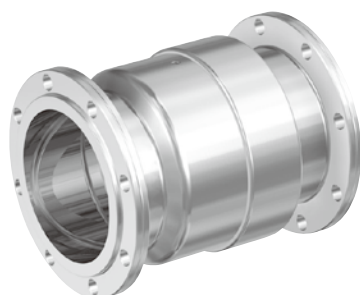
Wide variety of products  
with highly efficient  
performance



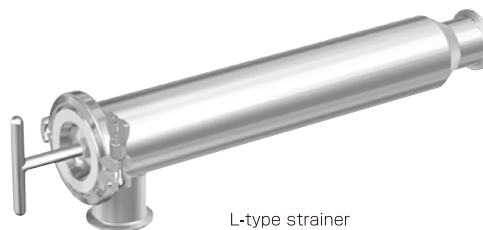
Swing bend with limit switch



Check valve



Expansion pipe



L-type strainer

Our products have been developed based on accumulated experience and knowhow in the stainless steel manufacturing field.

Products with high reliability and efficiently have been produced by close working of the technical and production team with the advanced production facilities.

#### Material

SUS-304 (or equivalent)

SUS-316L (or equivalent)

As special products, we can provide with material of other steel grade.

#### Production standard

Surface finish	Internal: #320 to #400 buff polishing External: #180 Hairline (Beads shot blast)
Dimensional tolerance	Face to face dimension : $\pm 1.5\text{mm}$ Angular tolerance (parallelism of end face) : $\pm 0.5^\circ$

#### ► Producible range

In addition to standard products according to ISO standards, we can provide special products according to specifications and design requested by customers. We would like to receive your requests and consult with you. Products in this catalog are not suitable for powders and gases.

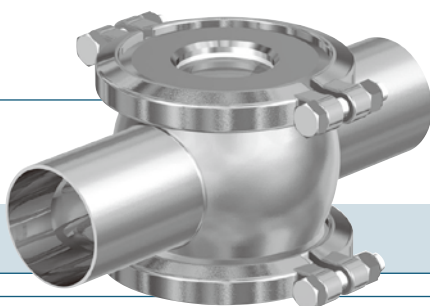
#### ► Internal/external surface finish roughness (buff polishing)

For internal and external surface roughness, if you have request, please give us test piece sample. We will polish at same roughness level.

#### ► Ordering

- Please inform us of material, product name, size, connection type and quantity.  
In case surface roughness is specified, please give us surface roughness of internal or external by providing us related standard and/or test piece sample.
- Refer to model code table.

# SG type

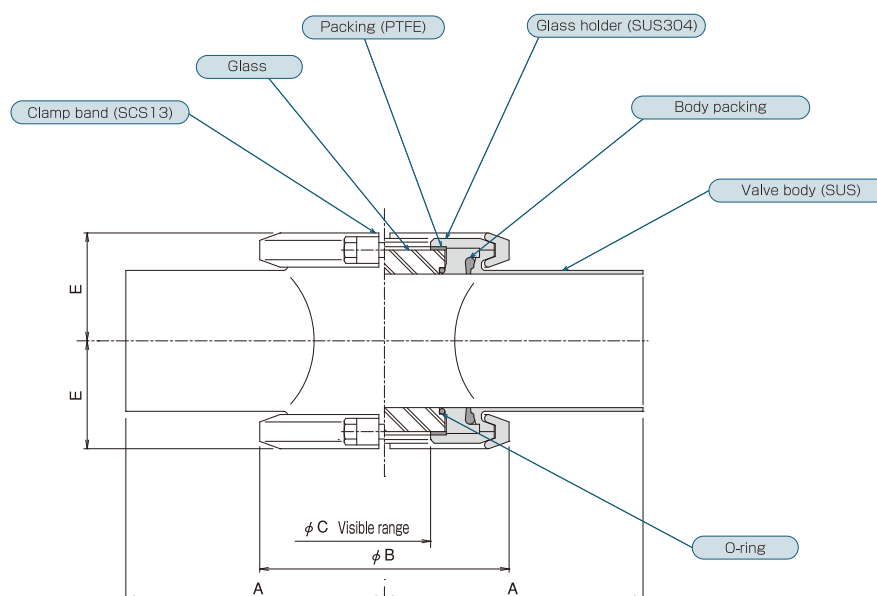


## Q TYPE

### ● Sight glass

SGQ type sight glass use sequence valve body and is designed with resistant to pipe distortion and thermal strain.

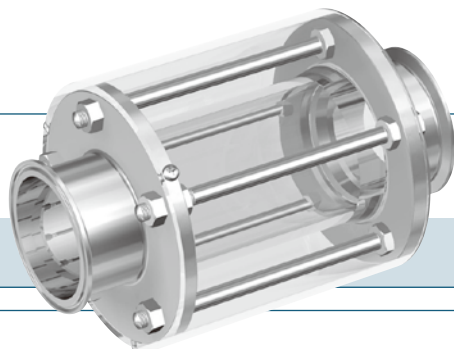
- Reducing remaining liquid by horizontal installation
- Maximum usable pressure : 1 MPa
- Heat resistance : 130°C(ΔT:103°C or less)
- Option : lighting device



(mm)

SIZE	A	B	C	E
10A	80	76	25	24.3
15A	80	76	25	26.5
1S	80	76	25	28.8
1.5S	100	105	40	39.4
2S	120	105	40	45.4
2.5S	125	121	50	51.5
3S	140	135	50	58.4
4S	160	157.5	50	71.1
5S	200	196.5	92	97.7
6S	220	196.5	92	110.4

# SG type

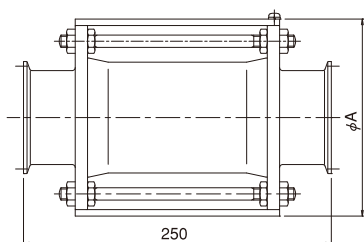
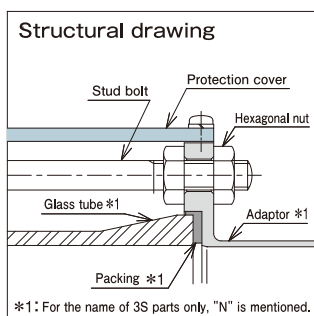


## L TYPE

- Sight glass with protection cover

SGL type is made of borosilicate glass with high transparency.

- Reducing remaining liquid by horizontal installation
- Maximum usable pressure : 0.6~0.3 MPa
- Heat resistance : 120°C (in static pressure less)
- 170L face to face dimension is available as option. (ferrule connection only)

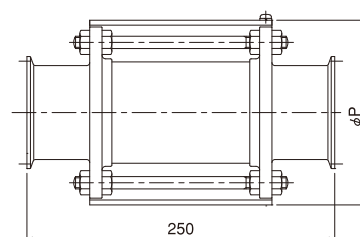
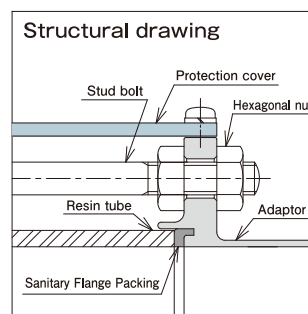


## P TYPE

- Sight glass

SGP type is made of PSF (polysulfone) resin with caustic resistance, heat shock resistance, impact resistance and strong against lateral force.

- Reducing remaining liquid by horizontal installation
- Maximum usable pressure : 0.8 MPa
- Heat resistance : 130°C
- 170L face to face dimension is available as option. (ferrule connection only)

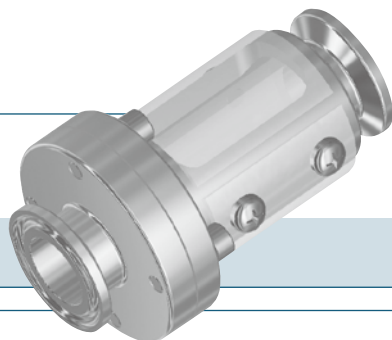


(mm)

TYPE	SGL Glass tube	SGP Resin tube	SGL Glass tube	SGP Resin tube
SIZE	φA	φP	Max pressure MPa (Reference)	
1	100	95	0.6	0.8
1 1/2	115	110	0.6	0.8
2	130	125	0.5	0.8
2 1/2	140	130	0.5	0.8
3	160 *2	150	0.5 *2	0.8
4	200	180	0.3	0.8

\*2: Glass tube of 3S SGL type is changed to straight glass tube.  
(Please be noted that it is not compatible with existing 3S type)

# SG type

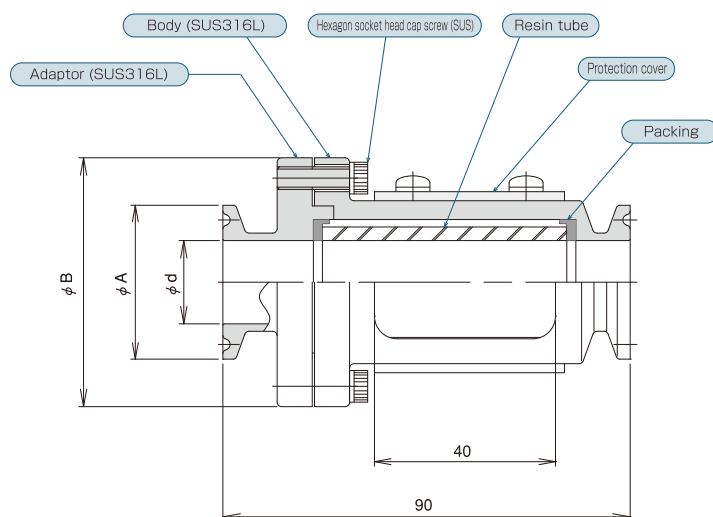


## C TYPE

### ● Sight glass

SGC type sight glass is designed compact and made of PSF (polysulfone) resin with caustic resistance, heat shock resistance, impact resistance and strong against lateral force.

- Reducing remaining liquid by horizontal installation
- Maximum usable pressure : 0.8 MPa
- Heat resistance : 130°C



(mm)

SIZE	φd	φA	φB
8A	10.5	34	55
10A	14.0	34	55
15A	18.4	34	55
1S	23.0	50.5	67.5

## Sanitary auxiliaries (sight glass) model code table

Name	JIS material classification	Finish classification	Pipe end classification	Size classification	Product name/type
Symbol			× ×	× ×	S G S
	①	②	③	④	⑤ ⑥

## ① Material (main body)

Type		SGQ type (Visible part : Borosilicate glass)			SGL type (Visible part : Borosilicate glass)		SGP type (Visible part : Polysulfone resin)		SGC type (Visible part : Polysulfone resin)	
Category	Symbol	Material			Material		Material		Material	
		Metal part	(Body) Packing	O-ring	Metal part	Packing	Metal part	Packing	Metal part	Packing
Standard	304	SUS 304 (or equivalent)	SE72 (VMQ : Gray)	NBR	SUS 304 (or equivalent)	SE72 (VMQ : White) <sup>*1</sup>	SUS 304 (or equivalent)	SE72 (VMQ : Gray)	—	—
	304-E	SUS 304 (or equivalent)	E81 (EPDM : Black)	EPDM	—	—	SUS 304 (or equivalent)	E81 (EPDM : Black)	—	—
	304-F	SUS 304 (or equivalent)	F8 (FKM : Black)	FKM	SUS 304 (or equivalent)	F8 (FKM : Black)	SUS 304 (or equivalent)	F8 (FKM : Black)	—	—
	316L	SUS 316L (or equivalent)	SE72 (VMQ : Gray)	NBR	SUS 316L (or equivalent)	SE72 (VMQ : White) <sup>*1</sup>	SUS 316L (or equivalent)	SE72 (VMQ : Gray)	SUS 316L (or equivalent)	SI (VMQ : Translucent)
	316L-E	SUS 316L (or equivalent)	E81 (EPDM : Black)	EPDM	—	—	SUS 316L (or equivalent)	E81 (EPDM : Black)	SUS 316L (or equivalent)	EPDM (Black)
	316L-F	SUS 316L (or equivalent)	F8 (FKM : Black)	FKM	SUS 316L (or equivalent)	F8 (FKM : Black)	SUS 316L (or equivalent)	F8 (FKM : Black)	SUS 316L (or equivalent)	FKM (Black)

\*1: For 3S only SI (VMQ : Translucent)

## ② Surface finish

Type		SGQ type		SGL/SGP type		
Category	Symbol	Finish		Symbol	Finish	
		Internal finish	External finish		Internal finish	External finish
Standard	<b>1P</b>	#320 to #400 buff polishing	Pickling or beads shot blast	<b>2P</b>	#320 to #400 buff polishing	#180 Hairline
Option	<b>0P</b>	Pickling	Pickling or beads shot blast	<b>0P</b>	Pickling	Pickling or beads shot blast
	<b>EP</b>	Electrolytic polishing	Pickling or beads shot blast	<b>EP</b>	Electrolytic polishing	#180 Hairline

## ③ Connection

Category	Symbol	Details
Standard	<b>M</b>	ISO male
	<b>C</b>	ISO clamp
	<b>T</b>	Sanitary flange (fixed)
	<b>R</b>	Sanitary flange (loose)
	<b>N</b>	ISO nut
Option	<b>W</b>	Weld
	<b>X</b>	Other

Note) SGC type is C only

## ④ Size (Q type)

Category	Symbol	Size
Standard	<b>03</b>	10A
	<b>04</b>	15A
	<b>10</b>	1S
	<b>15</b>	1 1/2S
	<b>20</b>	2S
	<b>25</b>	2 1/2S
	<b>30</b>	3S
	<b>40</b>	4S
	<b>45</b>	4 1/2S
	<b>50</b>	5S
	<b>60</b>	6S

## ④ Size (L/P type)

Category	Symbol	Size
Standard	<b>10</b>	1S
	<b>15</b>	1 1/2S
	<b>20</b>	2S
	<b>25</b>	2 1/2S
	<b>30</b>	3S
	<b>40</b>	4S
Option (L type only)	<b>35</b>	3 1/2S
	<b>45</b>	4 1/2S
	<b>50</b>	5S

## ④ Size (C type)

Category	Symbol	Size
Standard	<b>02</b>	8A
	<b>03</b>	10A
	<b>04</b>	15A
	<b>10</b>	1S

## ⑤ Type

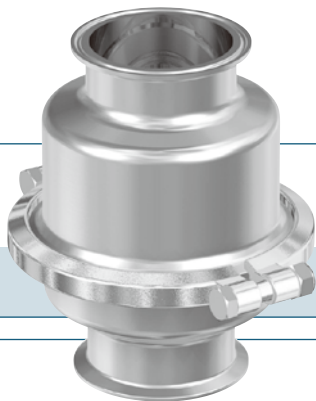
Symbol	Details
<b>Q</b>	Q type sight glass (Visible part : glass)
<b>L</b>	L type sight glass (Visible part : glass tube)
<b>P</b>	P type sight glass (Visible part : resin tube)
<b>C</b>	C type sight glass (Visible part : resin tube)

## ⑥ Accessories

Type	SGQ type	Type	SGL/SGP type
Symbol	Details	Symbol	Details
<b>0</b>	Without standard acrylic cover	<b>A</b>	With standard acrylic cover

## Check valve

## CV type

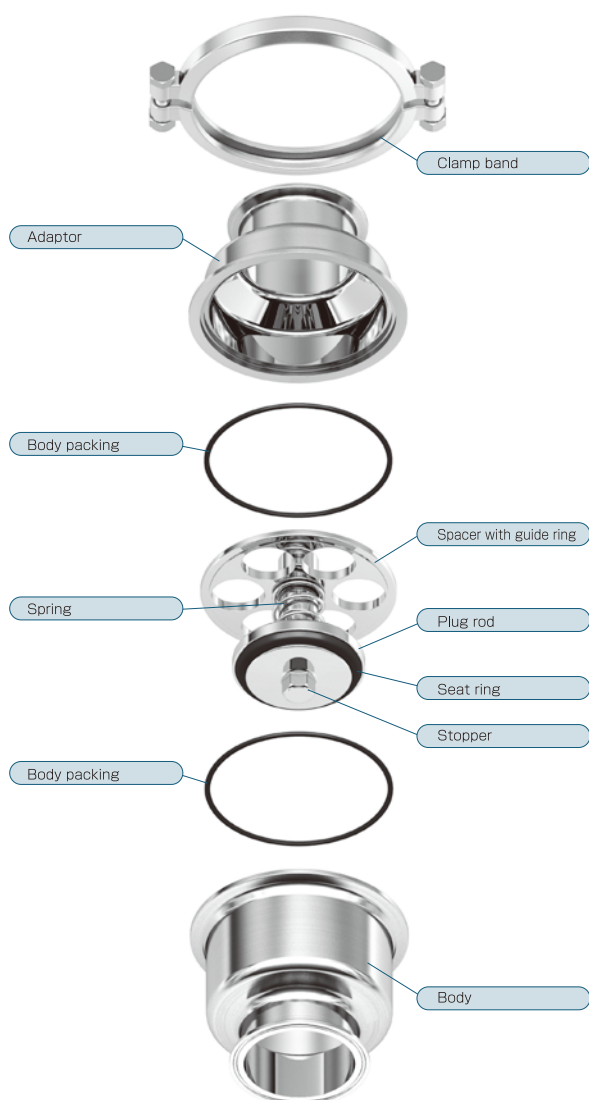


This check valve is a lift-type check valve.

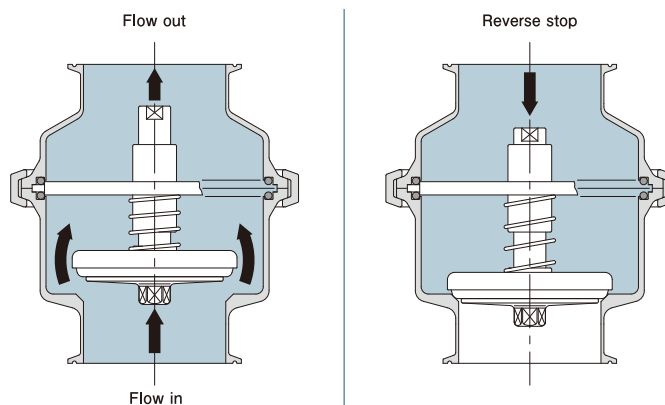
Check valves for vertical piping and horizontal piping are available. Check valves for horizontal piping are eccentric type so that no liquid pool is created. The standard type is equipped with a seat ring made of EPDM.

- Lift-check type system ensures correct operation.
- A special fluororesin guide ring is mounted on a standard spacer to prevent galling.
- Seat rings made of fluororubber, silicone rubber and PTFE are available as needed.
- This valve is designed to be used for liquids. If it is used for gases, chattering may occur.
- This valve cannot be used as a safety valve for containers (tanks).
- In case complete closing is required under slight back pressure, please use ON-OFF valve.

## Assembly

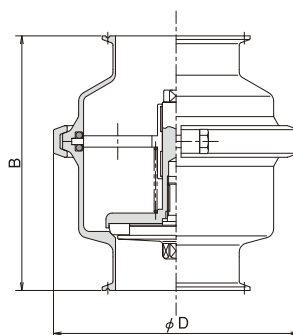


## Description of flow direction



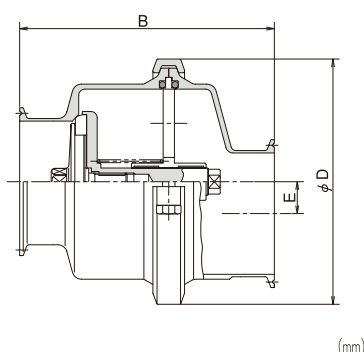
## C TYPE

- Concentric type (for vertical piping)



## E TYPE

- Eccentric type (for horizontal piping)



SIZE	B			φD	E	※B.P MPa
	M or C	N×N	T×T			
1	115	135	165	76	10.5	0.02
1 1/2	125	145	175	91.5	11.7	0.01
2	140	160	190	121	18.1	0.01
2 1/2	170	190	220	135	19.8	0.01
3	180	200	230	157.5	21.4	0.01
4	205	225	240	198.4	25.7	0.01

● This check valve is a backflow-prevention valve and the above B.P MPa values show only reference values.  
 \* B.P: Pressure when starting to open



## Sanitary auxiliaries (check valve) model code table

Name	JIS material classification	Finish classification	Pipe end classification	Size classification	Product name/type
Symbol			X X	X X	C V G -
	①	②	③	④	⑤ ⑥ ⑦ ⑧

## ① Material (main body)

Category	Symbol	Material		
		Matal Part	(Body) Packing	Seat Ring
Standard	<b>304</b>	SUS 304 (or equivalent)	E7 EPDM	E7 EPDM
Option	<b>316L</b>	SUS 316L (or equivalent)	E7 EPDM	E7 EPDM
Note	Check valve 316L ** uses SUS316 as the spring material.			

## ② Surface finish

Category	Symbol	Finish	
		Internal finish	External finish
Standard	<b>2P</b>	#320 to #400 buff polishing	#180 Hairline
Option	<b>OP</b>	Pickling	Pickling or beads shot blast
	<b>1P</b>	#320 to #400 buff polishing	Pickling or beads shot blast
	<b>EP(1P)</b>	Electrolytic polishing	Pickling or beads shot blast
	<b>EP(2P)</b>	Electrolytic polishing	#180 Hairline

## ③ Connection

Category	Symbol	Details
Standard	<b>M</b>	ISO male
	<b>C</b>	ISO clamp
	<b>T</b>	Sanitary flange (fixed)
	<b>R</b>	Sanitary flange (loose)
	<b>N</b>	ISO nut
Option	<b>W</b>	Weld
	<b>X</b>	Other

## ④ Size

Category	Symbol	Size
Standard	<b>10</b>	1S
	<b>15</b>	1 1/2S
	<b>20</b>	2S
	<b>25</b>	2 1/2S
	<b>30</b>	3S
	<b>40</b>	4S
Option	<b>45</b>	4 1/2S
	<b>50</b>	5S
	<b>60</b>	6S

## ⑤ Type

Symbol	Details
<b>C</b>	Concentric type
<b>E</b>	Eccentric type

## ⑥ Details

Symbol	Details
<b>G</b>	Guide ring type

## ⑦ Material of seat ring

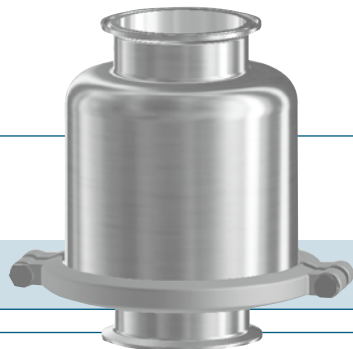
Symbol	Details
<b>S</b>	SE72 Silicone rubber
<b>E</b>	E7 EPDM
<b>V</b>	F8 Fluororubber

## ⑧ Material of body packing

Symbol	Details
<b>S</b>	SE72 Silicone rubber
<b>E</b>	E7 EPDM
<b>V</b>	FKM Fluororubber

## Swing check valve

## CVS type

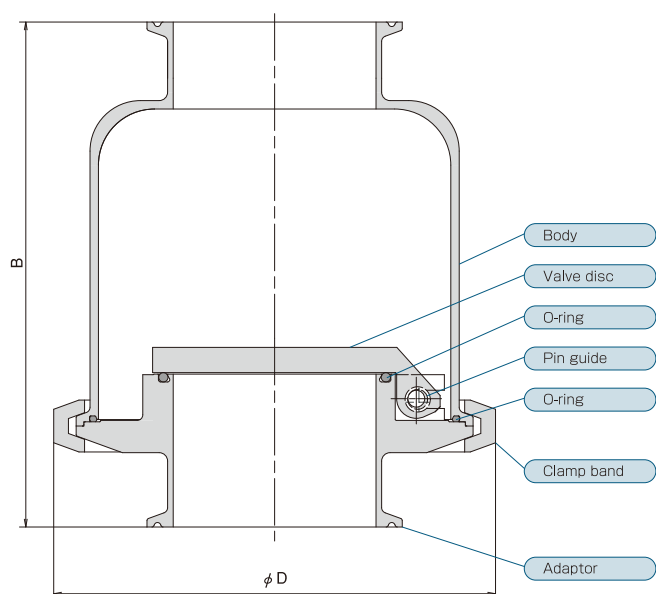


Valve disc is self weight swing type, it is reducing cracking pressure, improving drainage and keeping pressure loss low when the fluid pass through.

- Low cracking (opening) pressure
- Low pressure loss
- Reducing pulsation, and preventing the risk from resonance and chattering.

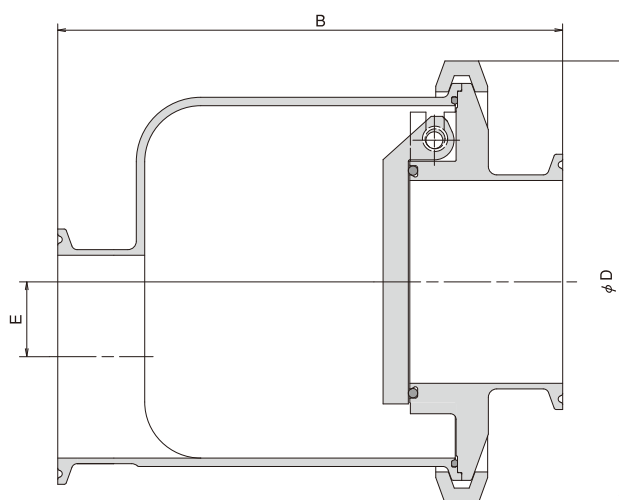
## C TYPE

- Concentric type (for vertical piping)



## E TYPE

- Eccentric type (for horizontal piping)

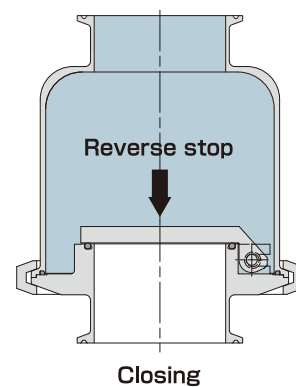
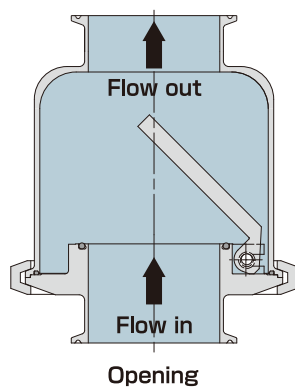


SIZE	B			φ D	E	Cracking pressure (MPa)
	M or C	N×N	T×T			
15A	105	—	—	91.5	21.8	0.001
1s	115	135	165	91.5	19.5	
1 1/2s	125	145	175	121	25.7	
2s	140	160	190	135	26.1	
2 1/2s	170	190	220	157.5	29.8	
3s	180	200	230	157.5	26.7	

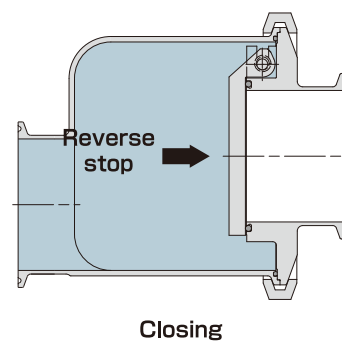
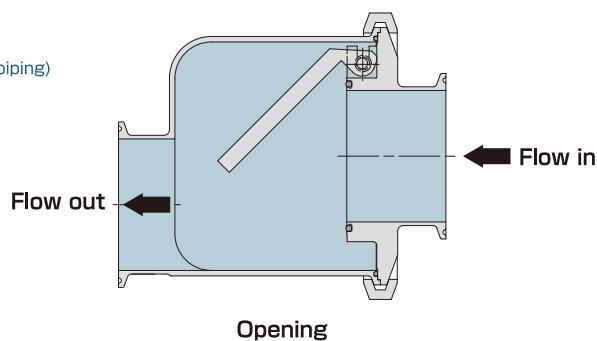
(mm)

## Description of flow direction

## ● Concentric type (for vertical piping)



## ● Eccentric type (for horizontal piping)



## Sanitary auxiliaries (swing check valve) model code table

Name	JIS material classification	Finish classification	Pipe end classification	Size classification	Product name/type
Symbol			X X	X X	C V S -
	①	②	③	④	⑤ ⑥

## ① Material (main body)

Category	Symbol	Material
		Metal part
Standard	<b>316L</b>	SUS 316L (or equivalent)

## ② Surface finish

Category	Symbol	Finish	
		Internal finish	External finish
Standard	<b>2P</b>	#320 to #400 buff polishing	#180 Hairline
Option	<b>EP (2P)</b>	Electrolytic polishing	#180 Hairline

## ③ Connection

Category	Symbol	Details
Standard	<b>M</b>	ISO Male
	<b>C</b>	ISO Clamp
	<b>T</b>	Sanitary flange (fixed)
	<b>N</b>	ISO Nut

## ④ Size

Category	Symbol	Size
Standard	<b>04</b>	15A
	<b>10</b>	1S
	<b>15</b>	1 1/2S
	<b>20</b>	2S
	<b>25</b>	2 1/2S
	<b>30</b>	3S

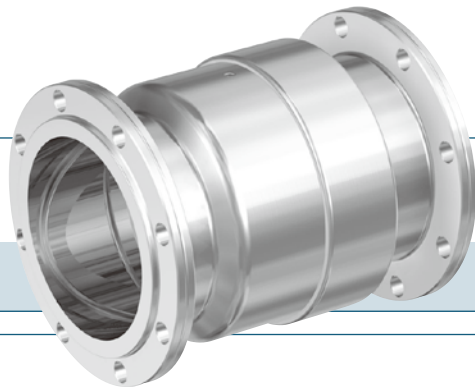
## ⑤ Type

Symbol	Details
<b>C</b>	Concentric type
<b>E</b>	Eccentric type

## ⑥ Material of O-ring

Symbol	Details
<b>S</b>	VMQ Silicon rubber
<b>E</b>	E7 EPDM
<b>V</b>	FKM Fluororubber

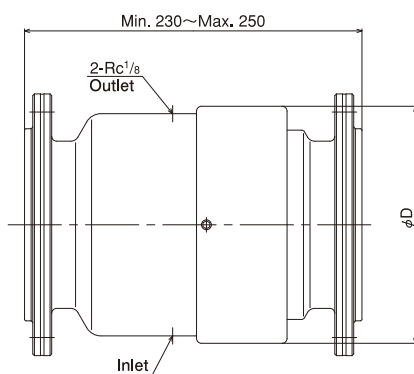
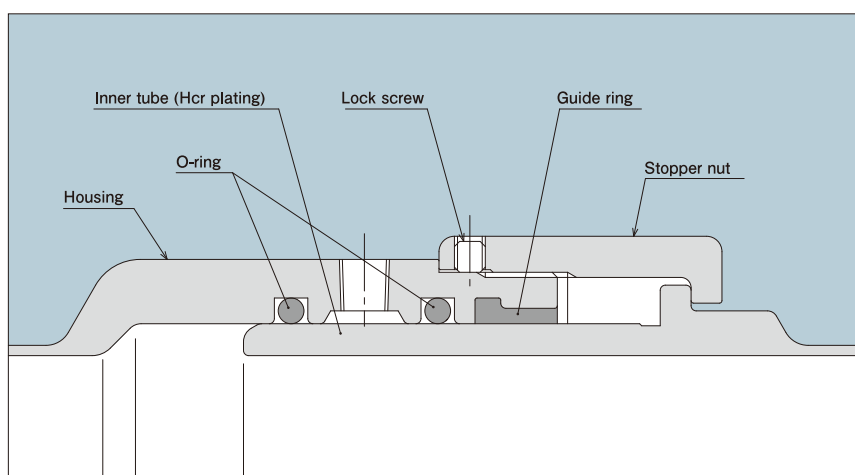
# EJN type



This expansion pipe is designed to absorb thermal expansion and contraction due to changes in temperature.

This expansion pipe must be mounted so that no offset loads are applied and the length should be set taking into consideration the temperature differences during use.

- It can be easily disassembled and cleaned to ensure thorough sanitairiness.
- The sliding surface is plated with hard chrome.
- The O-ring made of reinforced silicon rubber is mounted.



(mm)

SIZE	D
2	89
2 ½	105
3	117
4	144
5	183
6	210

## Sanitary auxiliaries (expansion pipe) model code table

Name	JIS material classification	Finish classification	Pipe end classification	Size classification	Product name/type
Symbol			X X	X X	E J S - N
	①	②	③	④	⑤

## ① Material (main body)

Category	Symbol	Material	
		Metal Part	O-ring
Standard	<b>304</b>	SUS 304 (or equivalent)	SE72 Silicone rubber
Note	The sliding surface is plated with hard chrome.		

## ② Surface finish

Category	Symbol	Finish	
		Internal finish	External finish
Standard	<b>1P</b>	#320 to #400 buff polishing	Pickling or beads shot blast
Option	<b>0P</b>	Pickling	Pickling or beads shot blast

## ③ Connection

Category	Symbol	Details
Standard	<b>M</b>	ISO male
	<b>C</b>	ISO clamp
	<b>T</b>	Sanitary flange (fixed)
	<b>R</b>	Sanitary flange (loose)
	<b>N</b>	ISO nut
Option	<b>W</b>	Weld
	<b>X</b>	Other

## ④ Size

Category	Symbol	Size
Standard	<b>20</b>	2S
	<b>25</b>	2 1/2S
	<b>30</b>	3S
	<b>40</b>	4S
	<b>45</b>	4 1/2S
	<b>50</b>	5S
	<b>60</b>	6S

## ⑤ Type

Category	Symbol	Details
Standard	<b>N</b>	N-type expansion pipe ( $\Delta L=20\text{mm}$ )
Option	<b>M or A</b>	M or A-type expansion pipe ( $\Delta L=50\text{mm}$ ) (A type is equipped with an auto drain.)

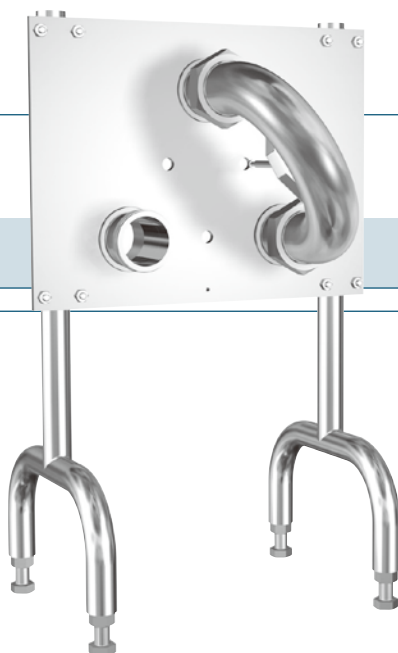
## Lubricant application specifications

Application specifications	Application range	Note
Standard	Sliding seal part	—
Lubricant	NOK Kluber PARALIQ GTE 703 *1 (NSF category H1)	

\*1 Conforming to the Food Sanitation Law

## Flow-change swing bend

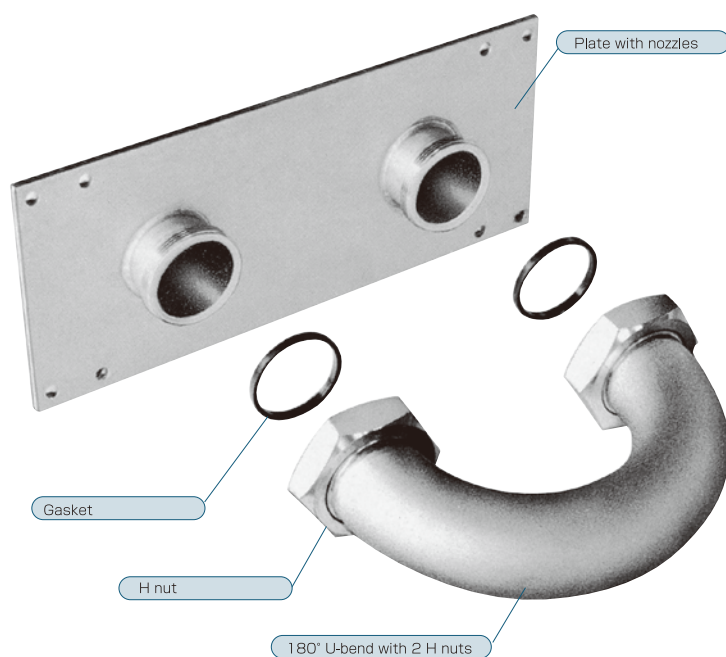
## SB type



The flow-change swing bend is designed to minimize the complexity of process lines and simplify them to increase workability. This product is also required to reliably change the line from the CIP line, etc.

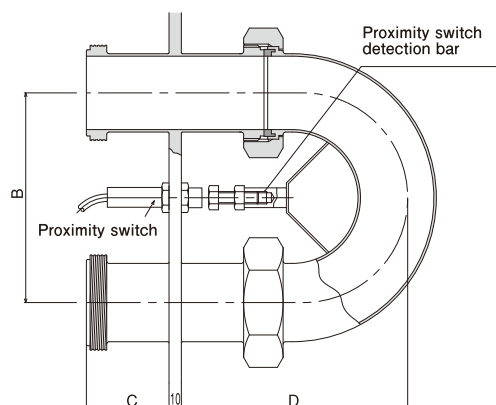
- The type equipped with a feedback switch is available for centralized control.

## Assembly



Since the gasket is fitted on the U-bend side, the U-bend can be easily detached and attached.

## Swing bend with feedback switch

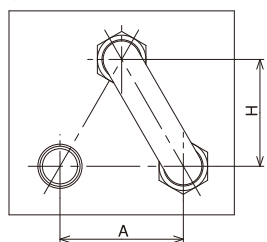


SIZE	B	C		D
		CLAMP	MALE	
1 1/2	114.4	62	71	157.2
2	152.4	62	71	176.2
2 1/2	190.6	62	71	195.3
3	254	62	71	227
4	254	57	71	225

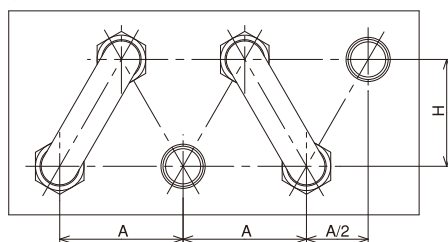
(mm)

- Standard type is shown in the following figures. Various combinations and shapes are available as specially-ordered products.

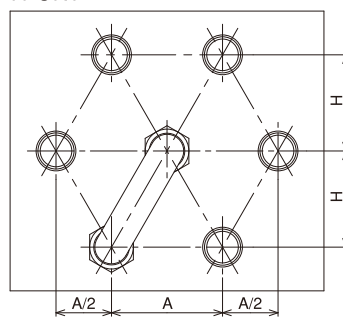
## 3PORT



## 6PORT



## 7PORT



SIZE	A	H
1 1/2	114.4	99
2	152.4	132
2 1/2	190.6	165
3	254	220
4	254	220

(mm)

## Sanitary auxiliaries (flow-change swing bend) model code table

Name	JIS material classification	Finish classification	Pipe end classification	Size classification	Product name/type
Symbol			X X	X X	S B S
	①	②	③	④	⑤ ⑥ ⑦

## ① Material (main body)

Category	Symbol	Material	
		Metal part	Gasket
Standard	<b>304</b>	SUS 304 (or equivalent)	SE72 silicone rubber
	<b>304-E</b>	SUS 304 (or equivalent)	E81 EPDM
	<b>304-F</b>	SUS 304 (or equivalent)	F8 fluororubber
Option	<b>316L</b>	SUS316L (or equivalent)	SE72 silicone rubber
	<b>316L-E</b>	SUS316L (or equivalent)	E81 EPDM
	<b>316L-F</b>	SUS316L (or equivalent)	F8 fluororubber
	<b>304-TL</b>	SUS 304 (or equivalent)	VMQ + PTFE lining
	<b>316L-TL</b>	SUS316L (or equivalent)	VMQ + PTFE lining

## ② Surface finish

Category	Symbol	Finish	
		Internal finish	External finish
Standard	<b>2P</b>	#320 to #400 buff polishing	#180 Hairline
Option	<b>OP</b>	Pickling	Pickling or beads shot blast
	<b>1P</b>	#320 to #400 buff polishing	Pickling or beads shot blast

## ③ Connection

Category	Symbol	Details
Standard	<b>M</b>	ISO male
	<b>C</b>	ISO clamp
	<b>T</b>	Sanitary flange (fixed)
	<b>R</b>	Sanitary flange (loose)
	<b>N</b>	ISO nut
Option	<b>W</b>	Weld
	<b>X</b>	Other

## ④ Size

Category	Symbol	Size
Standard	<b>15</b>	1 1/2S
	<b>20</b>	2S
	<b>25</b>	2 1/2S
	<b>30</b>	3S
	<b>40</b>	4S

## ⑤ Type

Symbol	Details
<b>S</b>	Standard port
<b>X</b>	Special port

## ⑥ Details

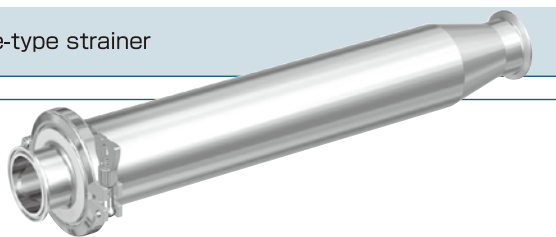
Symbol	Details
<b>***</b>	Describe the quantity in the order of nozzle, bend and BL nut.

## ⑦ Switch type and quantity

Symbol	Details
<b>J</b>	IGC2005-ARKG/UP made by ifm efector
<b>U</b>	FL7M-7J6HD made by Azbil
<b>R</b>	FL7M-7K6H made by Azbil
<b>P</b>	Other
<b>X</b>	Bracket only

# STS type

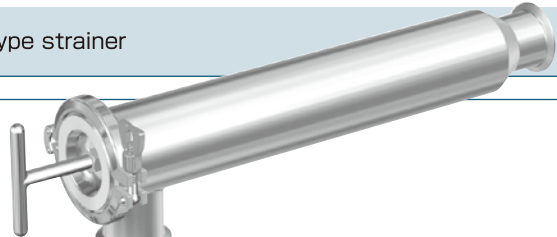
## ● Inline-type strainer



- Install this strainer between pipes.
- The mesh part consists of a single-layer #16 to #400 wire mesh as standard. Metal meshes with other counts and sintered metal mesh are available as options.
- If this type is installed in the product line, COP is required as needed.
- Specifications: Withstand pressure of main body: 0.6MPa; Heat resistance: 100°C

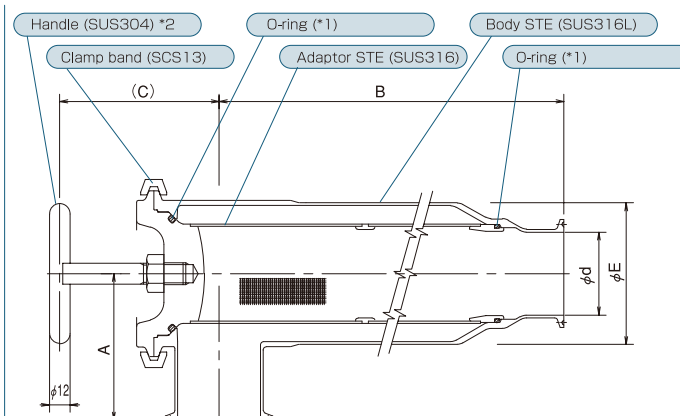
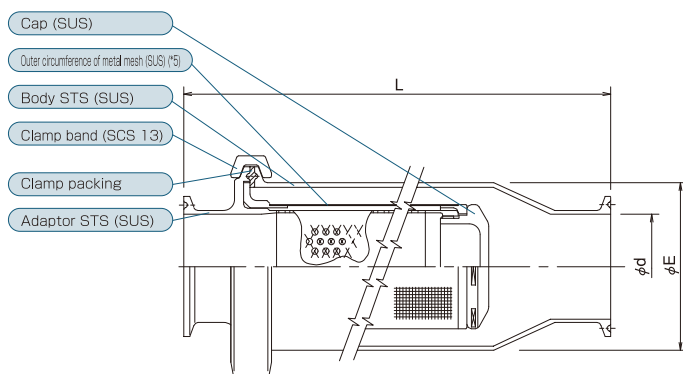
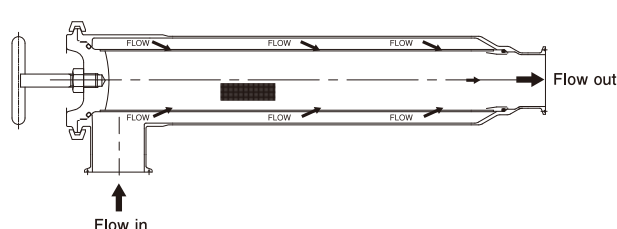
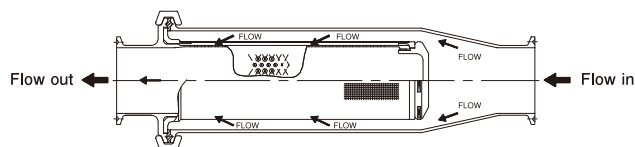
# STE type

## ● L-type strainer



- Install this strainer between pipes.
- The mesh part consists of a multi-layer #20 to #200 wire mesh as standard. Metal meshes with other counts and wedge wires are available as options.
- This type is designed to minimize dead space for cleaning.
- Specifications: Withstand pressure of main body: 1MPa; Heat resistance: 120°C

### Description of flow



SIZE	d	A	B	C	L	E	(mm) Filtration area and size ratio			
							F Filtration area (m <sup>2</sup> )		R Bore area ratio = F/0.785d <sup>2</sup>	
							STS *3	STE	STS *3	STE
1	23.0	70	250	95	300	63.5	40	200	9.6	48
1 1/2	35.7	70	340	102	400	63.5	80	320	8.0	32
2	47.8	82	425	107	500	76.3	135	515	7.6	29
2 1/2	59.5	105	490	104	600	101.6	200	855	7.3	31
3	72.3	110	510	110	600	114.3	285	970	6.8	23
4	97.6	160	600	128	700	139.8	500	1380	6.5	18

### STE-type standard mesh composition

Nominal	Mesh composition (from outer circumference to inner circumference)	Aperture (mm)
#20	#20+#16+#16	0.87
#40	#40+#20+#16+#16	0.41
#60	#60+#20+#16+#16	0.25
#80	#80+#20+#16+#16	0.20
#100	#100+#20+#16+#16	0.15
#150	#150+#100+#20+#16+#16	0.11
#200	#60+#200+#60+#20+#16	0.08

### Cv value

SIZE	STS type	STE type
1	19	13
1 1/2	45	29
2	70	50
2 1/2	118	88
3	150	112
4	220	177

### Tolerable differential pressure (MPa)

SIZE	STS type *4	STE type
1	0.05	0.20
1 1/2	0.05	0.20
2	0.05	0.15
2 1/2	0.05	0.15
3	0.05	0.10
4	0.05	0.10

Note:

\*1: For O-ring material of STE type, select from EPDM, FKM, and silicone rubber.

\*2: Before removing the handle of STE-type, cover the screw hole with plastic cap.

\*3: The values of STS type are calculated by multiplying the area of mesh part by the hole area ratio of the punched metal.

\*4: The strength of the mesh part of STS type is affected by not only differential pressure value but also liquid pulsation, swirling flow, initial dynamic pressure, etc.

\*5: In the case where 316L is used as the material for STS type, 316 may be used instead of 316L depending on mesh stock situation.



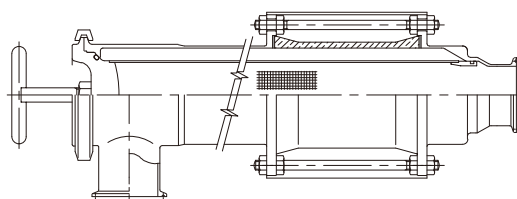
## STE type

### ● L-type strainer with sight glass

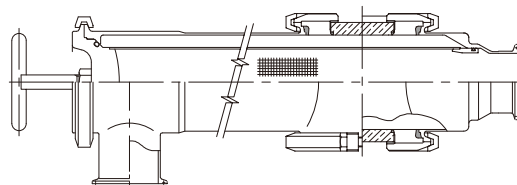
Attaching a sight glass to the STE-type strainer allows you to check the condition of mesh part as needed. Regarding the sight glass to be used, use SGL type with an acrylic cover for 1s to 2.5s and use an SGQ-type sight glass for 3s and 4s. The withstand pressure of the main body is same as sight glass.

Refer to the withstand pressure on page 3.

1s~2.5s



3s、4s

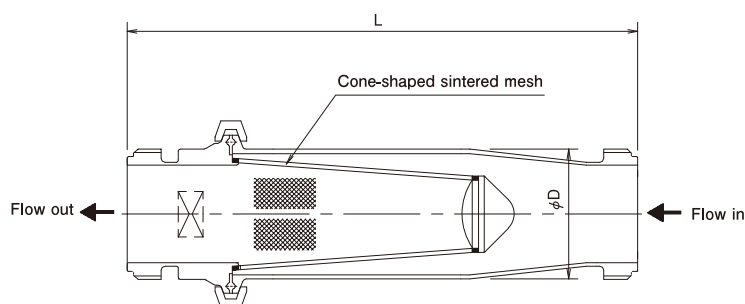


## STF type

### ● Compact strainer

This strainer is equipped with a cone-shaped sintered mesh, which allows you to install it in short distances between faces to prevent contamination, and to monitor inside. Use this strainer as the final strainer before the filling machine for liquids without solid materials.

1s~2s

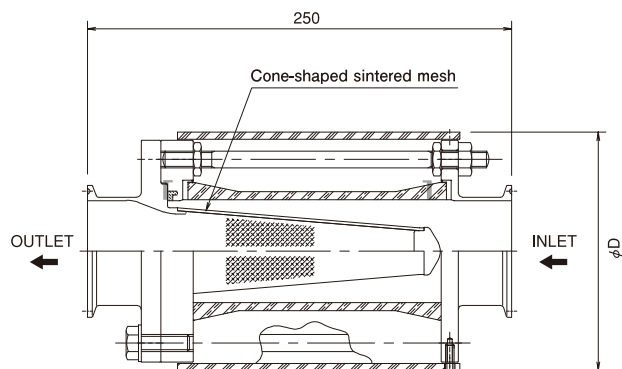


SIZE	φD	L	(mm) Filtration area and bore area ratio		
			Cv (Clogging ratio: 0%)	F Filtration area (cm <sup>2</sup> )	R Bore area ratio =F/0.785d <sup>2</sup>
1	38.1	200	18	44.3	10.7
1½	50.8	230	40	89.9	9.0
2	63.5	250	69	150	8.4

## STC type

### ● Strainer with sight glass

The cone-shaped strainer is mounted in the standard sight glass, which allows you to install it in short distances between faces to prevent contamination, and to monitor inside. Use this strainer as a final strainer before the filling machine.

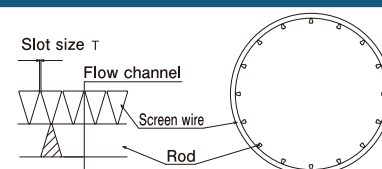


SIZE	φD	(mm) Filtration area and bore area ratio			
		Cv (Clogging ratio: 0%)	Cv (Clogging ratio: 50%)	F Filtration area (cm <sup>2</sup> )	R Bore area ratio =F/0.785d <sup>2</sup>
2½	140	60	40	150	5.4
3	160	100	70	190	4.7
4	200	160	110	260	3.5

### ► Optional mesh

#### Wedge wire

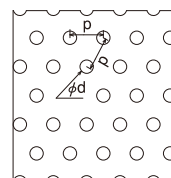
For highly-viscous liquids



Slot size T	Note	O.A (%) aperture ratio	Applicable size
0.150mm	Equivalent to #100	9	STE type: 1s~4s
0.075mm	Equivalent to #200	4.7	

#### Punched metal

Use this metal to catch larger foreign materials only.



φd	p	O.A (%) aperture ratio
1.0	2.0	22.6
1.5	3.0	22.6
2.0	4.0	29.6
3.0	5.0	32.6
4.0	7.0	29.6
5.0	8.0	35.4
8.0	10.0	40.2

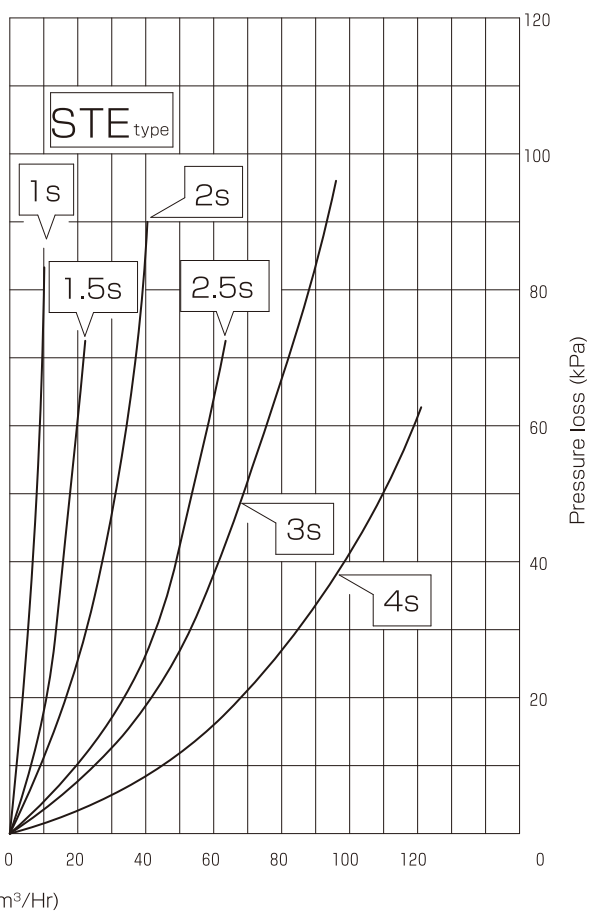
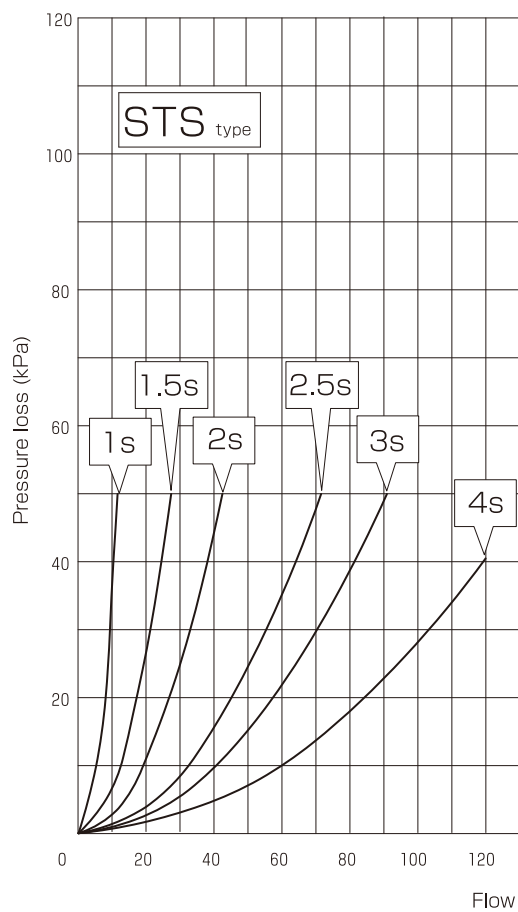
#### Etching

Nominal	Opening diameter (mm)	O.A (%) aperture ratio
#20	φ0.87	40.6
#40	φ0.4	40.3
#60	φ0.25	40.3
#80	φ0.2	40.3
#100	φ0.15	40.3
#150	φ0.1	28

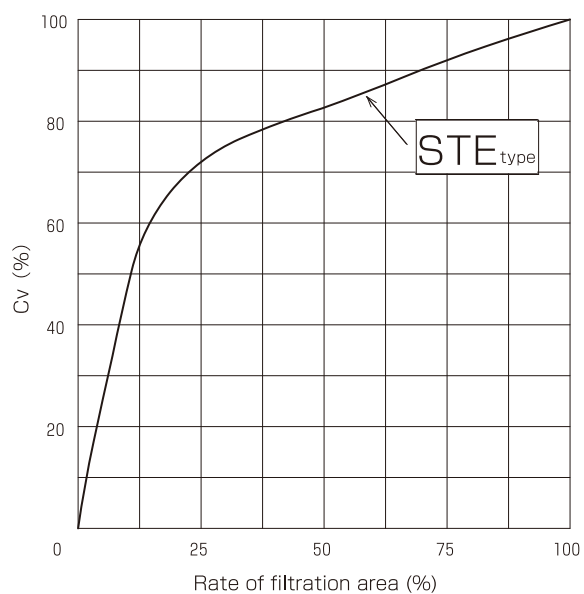
Technical material (strainer)

► Pressure loss in standard strainer

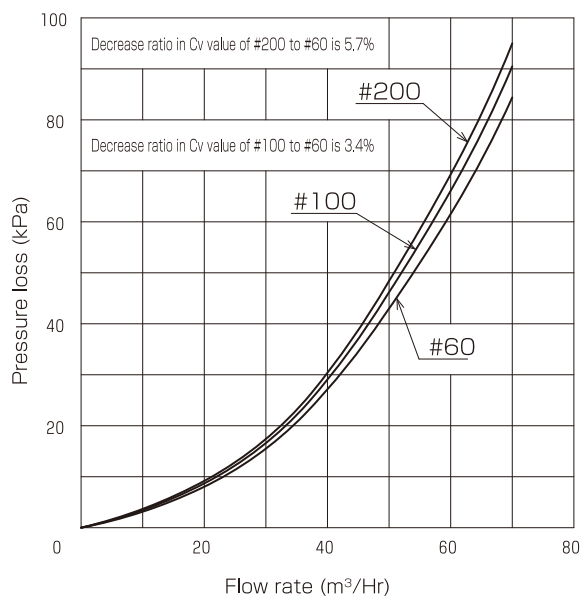
Conditions < Liquid : Fresh water, Temperature : 15°C, Density : 1000kg/m<sup>3</sup>, Viscosity : 1cP #60 >



► Change in Cv value for STE-type filtration area (clogging degree)



► Change in Cv value against mesh count (2.5s STE type)



## Sanitary auxiliaries (strainer) model code table

Name	JIS material classification	Finish classification	Pipe end classification	Size classification	Product name/type
Symbol			X X	X X	S T
	①	②	③	④	⑤ ⑥ ⑦

## ① Material (main body) STE type

Category	Symbol	Material	
		Metal part	O-ring
Standard	<b>316-S</b>	SUS 316L (or equivalent)	SI silicone rubber
	<b>316-E</b>	SUS 316L (or equivalent)	EPDM
	<b>316-F</b>	SUS 316L (or equivalent)	FKM fluororubber
Note	Material of sintered metal mesh is SUS316		

## ① Material (main body) STS type

Category	Symbol	Material	
		Metal part	Packing (40MP) ※2
Standard	<b>304</b>	SUS 304 (or equivalent)	EPDM
	<b>316L</b> ※1	SUS 316L (or equivalent)	
Option	—	—	silicone rubber, fluororubber
※1 : Material of mesh is SUS316			
※2 : 3S and 4S are silicone rubber only			

## ② Surface finish

Category	Symbol	Finish	
		Internal finish	External finish
Standard	<b>1P</b>	#320 to #400 buff polishing	Beads shot blast
	<b>2P</b>	#320 to #400 buff polishing	#180 Hairline
Option	<b>0P</b>	Pickling	Beads shot blast
	<b>EP (1P)</b>	Electrolytic polishing	Beads shot blast

## ③ Connection

Category	Symbol	Details
Standard	<b>M</b>	ISO male
	<b>C</b>	ISO clamp
	<b>T</b>	Sanitary flange (fixed)
	<b>R</b>	Sanitary flange (loose)
	<b>N</b>	ISO nut
Option	<b>W</b>	Weld
	<b>X</b>	Other

## ④ Size

Symbol	Size
<b>10</b>	1s
<b>15</b>	1 1/2s
<b>20</b>	2s
<b>25</b>	2 1/2s
<b>30</b>	3s
<b>40</b>	4s

## ⑤ Type

Category	Symbol	Details
Standard	<b>S</b>	In-line type, Separate mesh part type
	<b>E</b>	L type, Integrated adaptor and mesh part
Option	<b>F</b>	Compact type
	<b>C</b>	Strainer with sight glass
	<b>Other</b>	S or E type with sight glass

## ⑥ Structure classification

Category	Symbol	Details
STS	<b>#</b>	Plain weave (twilled) mesh
	<b>B#</b>	Sintered metal mesh
STE	<b>AB</b>	O-ring seal + sintered metal mesh
STF	<b>C</b>	Corn type sintered metal mesh
STC	<b>B#</b>	Corn type sintered metal mesh

## ⑦ Mesh classification

Category	Symbol	Details
Standard	<b>16~400</b>	#16~#400 (some standard size skipped) STS type ※3
	<b>20~200 (Sintered)</b>	#20~#200 (some standard size skipped) STS / STE / STF / STC type
※3 : Plain weave over #250 is twilled weave.		



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