

Fluid Control Products

19



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BSV-2EN

■Features

1. Non-rising handwheel: Free from foreign substance trouble because most threaded surface is covered.
2. No leakage by two-stage sealing of double bellows and gland packing.
3. Gland packing does not need retightening nor applying pressure on spindle, thus handwheel can be turned with small torque without interference from the spindle.
4. Maintenance-free: No need to replace or retighten gland packing.

■Specifications

Model		BSV-2EN	
Application		Steam, Air, Cold and hot water, Oil, Other non-dangerous fluids	
Nominal size		15A-200A *1	
Max. pressure		1.6 MPa *2	2.5 MPa *2
Max. temperature		300°C *2	350°C *2
Material	Body	Cast Iron	Ductile Cast Iron
	Bonnet	Ductile Cast Iron	
	Valve	Stainless steel	
	Valve seat	Stainless steel	
	Bellows	Stainless steel (SUS316Ti)	
Connection		EN 1092-2 PN16	EN 1092-2 PN25

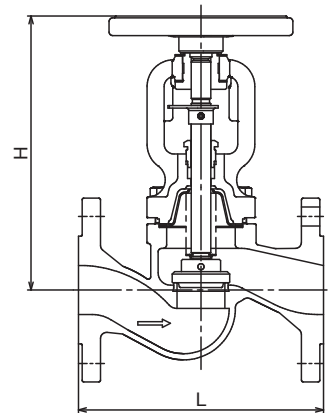
*1 If 250A is needed, please contact us (for cast iron body only).

*2 According to PT rating.

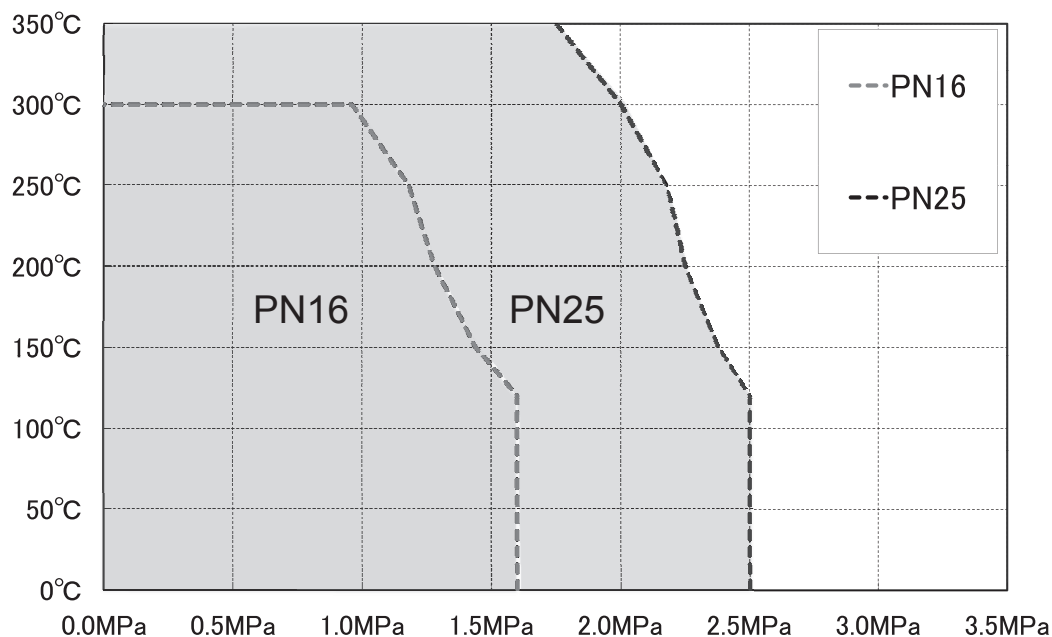
■Dimensions (mm) and Weights (kg)

Nominal size	L	H	Weight
15A	130	178	3.2
20A	150	178	3.9
25A	160	193	4.6
32A	180	201	6.5
40A	200	224	9.0
50A	230	228	11.0
65A	290	270	15.8
80A	310	295	20.5
100A	350	321	35.0
125A	400	388	49.0
150A	480	448	76.0
200A	600	575	130.5

· Face-to-face dimension: EN 558-1 series 1.



■Pressure and Temperature Rating



- This chart shows PT rating of PN16 for cast iron flanges and of PN25 for ductile cast iron flanges according to EN 1092-2.
- BSV-2EN PN16 flanged can be used in orange region. BSV-2EN PN25 flanged can be used in orange and green regions.
- If detailed values of maximum fluid temperature and maximum pressure are needed, please see the following table:

Acc to EN 1092-2		Temperature [C°]					
Material	PN	-10 up to 120	150	200	250	300	350
Cast iron	16	1.60 MPa	1.44 MPa	1.28 MPa	1.12 MPa	0.96 MPa	–
Ductile cast iron	25	2.50 MPa	2.43 MPa	2.30 MPa	2.18 MPa	2.00 MPa	1.75 MPa

GLV-1

Wetted parts of GLV-1 are made of bronze or dezincification resistant brass.
Widely applicable for steam, air, water or oil application.

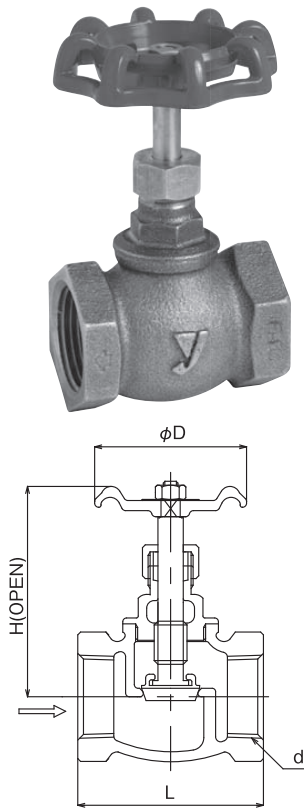
■Specifications

Application		Steam, Air, Cold and hot water, Oil, Other non dangerous fluids
Maximum pressure		1.0 MPa
Maximum temperature		185°C
Material	Body	Bronze
	Bonnet	Brass or bronze
	Disc	Brass or bronze
Connection		JIS Rc screwed

* Valve is closed at the time of shipment from factory.

■Dimensions (mm) and Weight (kg)

Nominal size	d	L	H	D	Weight
15A	Rc 1/2	50	76	54	0.3
20A	Rc 3/4	57	86	61	0.4
25A	Rc 1	65	100	68	0.6
32A	Rc 1-1/4	75	123	77	0.9
40A	Rc1-1/2	85	135	77	1.1
50A	Rc 2	100	159	83	1.7



GLV-16

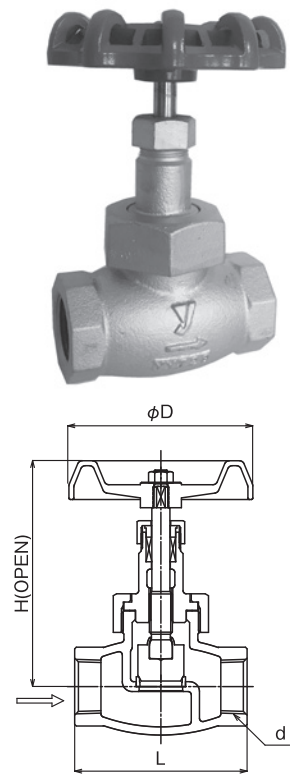
Wetted parts of GLV-16 are made of ductile cast iron.
Widely applicable for steam, air, water or oil application.

■Specifications

Application		Steam, Air, Cold and hot water, Oil, Other non dangerous fluids
Maximum pressure		2.2 MPa
Maximum temperature		220°C
Material	Body	Ductile cast iron
	Bonnet	Ductile cast iron
	Disc	Stainless steel
Connection		JIS Rc screwed

■Dimensions (mm) and Weights (kg)

Nominal size	d	L	H	D	Weight
15A	Rc 1/2	75	126	83	0.9
20A	Rc 3/4	90	135	105	1.1
25A	Rc 1	105	150	112	1.7
32A	Rc 1-1/4	120	162	132	2.7
40A	Rc1-1/2	135	183	132	3.8
50A	Rc 2	160	186	132	5.6



BLV-1

Body of BLV-1 is made of bronze and ball is made of chrome-plated or stainless steel.

Widely applicable for steam, air, water or oil application

Specifications

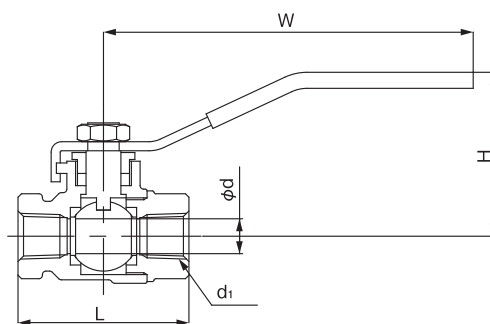
Application		Steam, Air, Cold and hot water, Oil, Other non dangerous fluid
Maximum pressure		Saturated steam: 1.0 MPa Water, oil, air or other non-dangerous fluid at 40°C or lower: 4.12 MPa
Material	Body	Bronze
	Ball	Cr plated brass or stainless steel
	Stem	Brass
Connection		JIS Rc screwed

* Valve (ball) is closed at the time of shipment from factory.

* There is no restriction on flow direction.

Dimensions (mm) and Weight (kg)

Nominal size	d ₁	d	L	H	W	Weight
8A	Rc 1/4	10	49	47	106	0.2
10A	Rc 3/8	10	49	47	106	0.2
15A	Rc 1/2	12.7	53	47	106	0.3
20A	Rc 3/4	15	56	52	106	0.3
25A	Rc 1	20	68	55	106	0.5
32A	Rc 1-1/4	25	86	66	136	0.8
40A	Rc 1-1/2	31.8	96	72	136	1.2
50A	Rc 2	38	108	77	136	1.8



Please refer to the manual attached to the product for procedures for installation and operation.

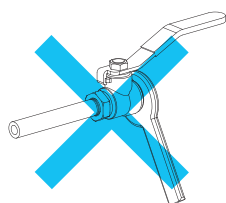
GLV-1 Globe valve/BLV-1 Ball valve

Precautions for installation

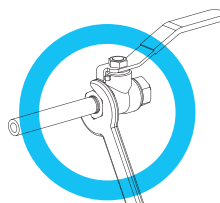
GLV-1 Globe Valve/BLV-1 Ball Valve

- Store the product indoors in a dust free, low humidity, dry and ventilated environment.
- Installation should be conducted by suitably trained personnel, wearing protective head, eye, hand and foot protection.
- The product can be used for "complete opening" and "complete closing". If the product is used at intermediate opening, ball and ball seat may be damaged.
- Be careful that the threaded connection between the mating pipe and the internal threaded connections of the valves are in line to avoid piping stresses in the valves.
- During transportation or storage of the product leakage may occur from the washer of packing due to decreasing of tightening pressure by stress relaxation of the packing. Be sure to retighten the washer of packing before use.
- When connecting the product and the piping, apply seal agent (such as seal tape) to the screw part of the piping. Use seal agent appropriate for temperature, fluid, etc.
- In case that the product is expected to be frozen, be sure to conduct freezing prevention measures or water draining treatment (after use).
- For Globe valve, sliding of stem may lead to mix the chipping of packing with the inside of fluid at the stage of valve open and close operation by turning the handle. To avoid mixing of packing chipping with the inside of fluid, place the filter under the globe valve.
- Globe valve can be used (fully opened)/(fully closed) operation. It can be damaged to the valve body and valve seat area by erosion when using partially open and close condition.
- Please be sure to open and close operation of globe valve by manual. Do not apply the turning of handle. If doing so, it may cause damage.
- To connect the product to piping, use appropriate tool such as spanner with spanner apply part near the piping. In addition, do not make piping work with applying a pipe wrench to the product. If doing so, it leads to malfunction of the product. (see fig. 1)

Fig. 1



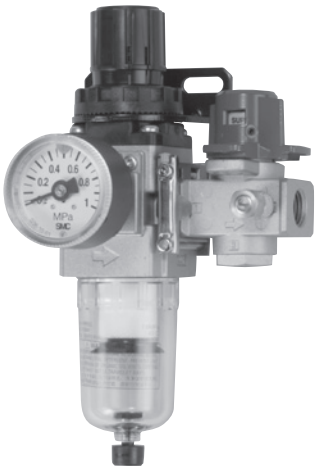
N.G.



O.K.

GD-37U standard unit for manipulation

Standard unit for manipulation of pneumatic pressure reducing valve is a combination of necessary equipment such as pressure reducing valve with filter for air (GD-37), pressure gauge, needle valve, combination adapter and bracket for installation. It is designed to make good use of performance of pneumatic pressure reducing valve. It is also usable for operation of air operated valves (PD-1, PD-2, and PD-3).



- * Pneumatic pressure reducing valve with filter (GD-37) is available as an individual item.
- * Connection size is JIS Rc 1/4.

GD-37 pressure reducing valve with filter

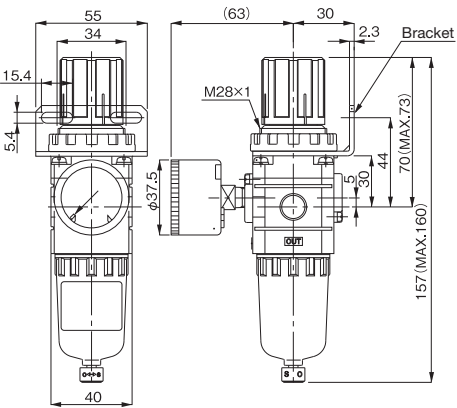
■Specifications and Dimensions

Application	Air
Inlet pressure	0.99 MPa or lower
Reduced pressure	0.05-0.85 MPa
Temperature	5-60°C
Pressure resistance of body	1.5 MPa
Nominal filtration rating	5 μ m
Pressure gauge connection size	JIS Rc 1/4
Weight	0.35 kg

- * Pressure gauge is equipped with limit indicator and the maximum indicated pressure is 1.0 MPa.

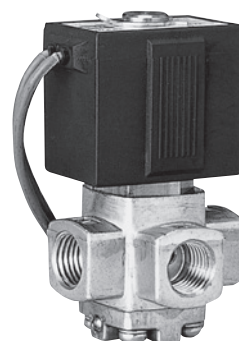
■Precautions for Handling

- Please do flushing of air pipe before installation.
- Since the material of the filter case is polycarbonate, please avoid application of (or use in atmosphere of) chemicals such as thinner, carbon tetrachloride, chloroform, acetate, aniline, cyclohexane, trichloroethylene, acetone, alkali, sulfuric acid, lactic acid and so on.



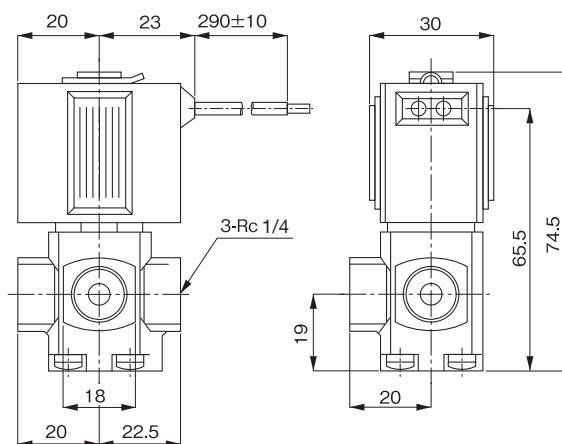
DD-37 3/2 way solenoid valve

DD-37 3/2 way solenoid valve is suitable for automatic control (ON-OFF) of pneumatic pressure reducing valve and air operated valve (PD-1, PD-2, and PD-3). It is also usable for controlling small flow rate of water or oil.



■Specifications and Dimensions

Application	Air, Water, Oil
Connection size	JIS Rc 1/4
Orifice diameter	1.5 mm
Cv value	0.08
Maximum differential pressure	0.7 MPa
Pressure resistance of body	2.0 MPa
Voltage and frequency	AC100V 50 / 60Hz AC200V 50 / 60Hz



AO-2

■Features

1. Body larger than nominal size slows the velocity of water, and the baffle effectively separates air.
2. Prevents noise of water hammer caused by air.
3. Prevents corrosion of piping system caused by air.

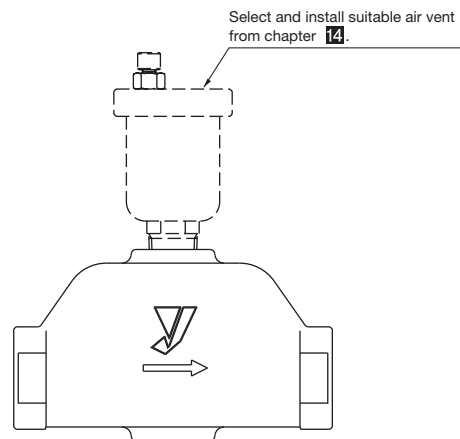
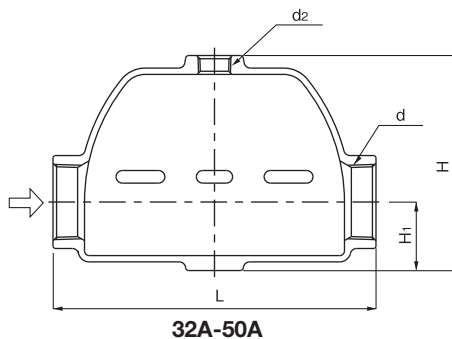
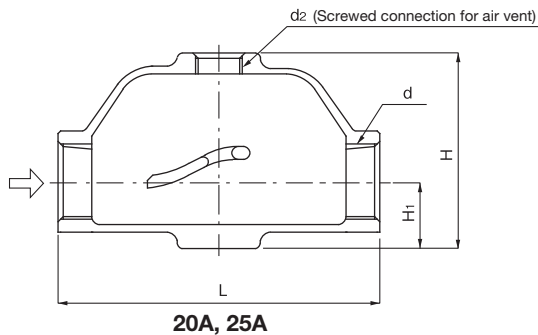


■Specifications

Application	Cold and hot water
Max. pressure	1.0 MPa
Max. temperature	120°C
Material	Bronze
Connection	JIS Rc screwed

■Dimensions (mm) and Weights (kg)

Nominal size	d	L	H	H ₁	d ₂	Weight
20A	Rc 3/4	120	84	27.5	Rc 1/2	1.1
25A	Rc 1	140	84	27.5	Rc 1/2	1.2
32A	Rc 1-1/4	155	113.5	33.5	Rc 1/2	2.0
40A	Rc 1-1/2	205	136.5	43.5	Rc 1/2	3.6
50A	Rc 2	205	136.5	43.5	Rc 1/2	3.8



SCV-2



The SCV-2 is an inline type check valve to prevent fluid backflow. It is used widely for steam or water (hot water) piping, etc. and effective in preventing water hammer.

■Features

1. Compact piping.
2. Can be connected in any direction (horizontal or vertical).

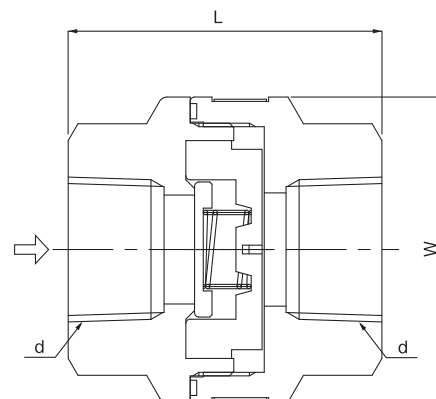
■Specifications

Application	Steam, Cold and hot water	
Maximum pressure	1.6 MPa	
Application temperature	5-220°C	
Minimum valve opening pressure	0.003 MPa	
Material	Body	Cast stainless steel
	Disc	Stainless steel
Connection	JIS Rc screwed	

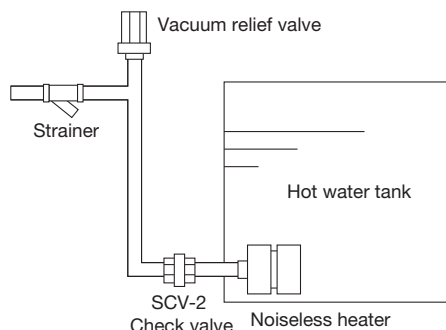
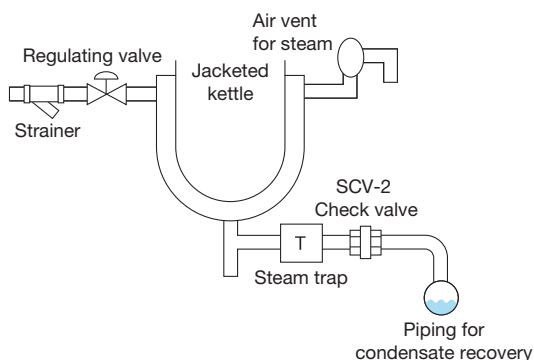
· A small amount of fluid leaks out of the product. So, it should not be used for applications requiring complete closing.

■Dimensions (mm) and Weights (kg)

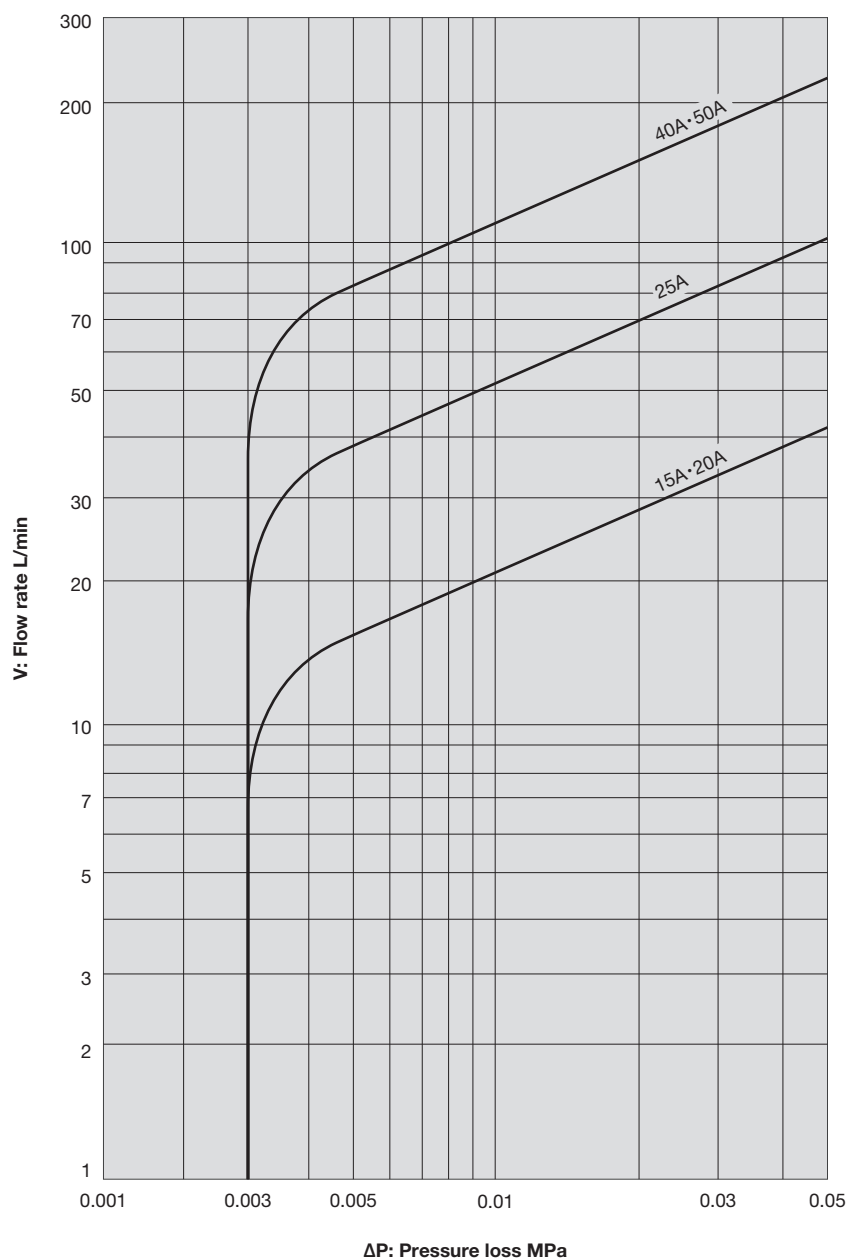
Nominal size	d	L	W	Weight
15A	Rc 1/2	57	50	0.5
20A	Rc 3/4	57	50	0.45
25A	Rc 1	72	69	1.1
40A	Rc 1-1/2	88	89	2.0
50A	Rc 2	88	89	1.5



■Piping Example



■ Pressure Loss Chart (For water)



SCV-3



The SCV-3 is a shape of body check valve to prevent fluid backflow. It is used widely for steam or water (hot water) piping, etc. and effective in preventing water hammer.

■Features

1. Can be installed between a lot of major flange types and connection standards without measuring device due to the shape of body.
2. Can be connected in any direction (horizontal or vertical).

■Specifications

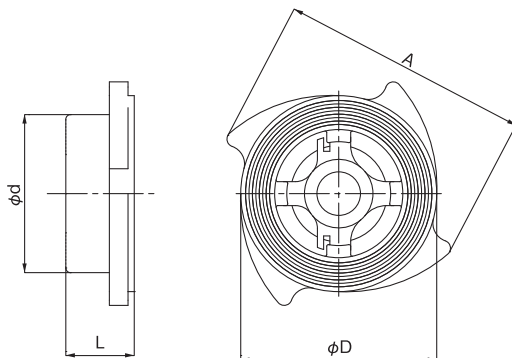
Application		Steam, Cold and hot water
Maximum pressure		2.0 MPa
Maximum temperature		220°C
Minimum opening pressure		0.003 MPa
Material	Body	Cast stainless steel
	Disc	Cast stainless steel
Connection		Wafer *

* A small amount of fluid leaks at the valve seat. So, it should not be used for applications requiring complete closing.

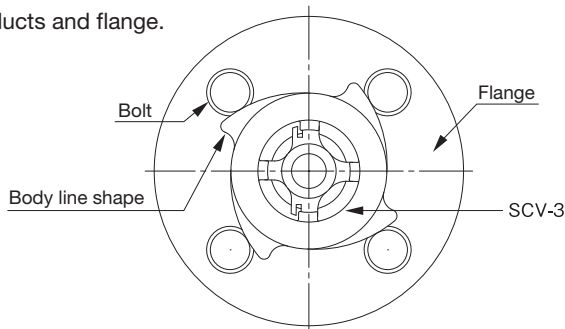
* See another table regarding applicable connection standard.

■Dimensions (mm) and Weights (kg)

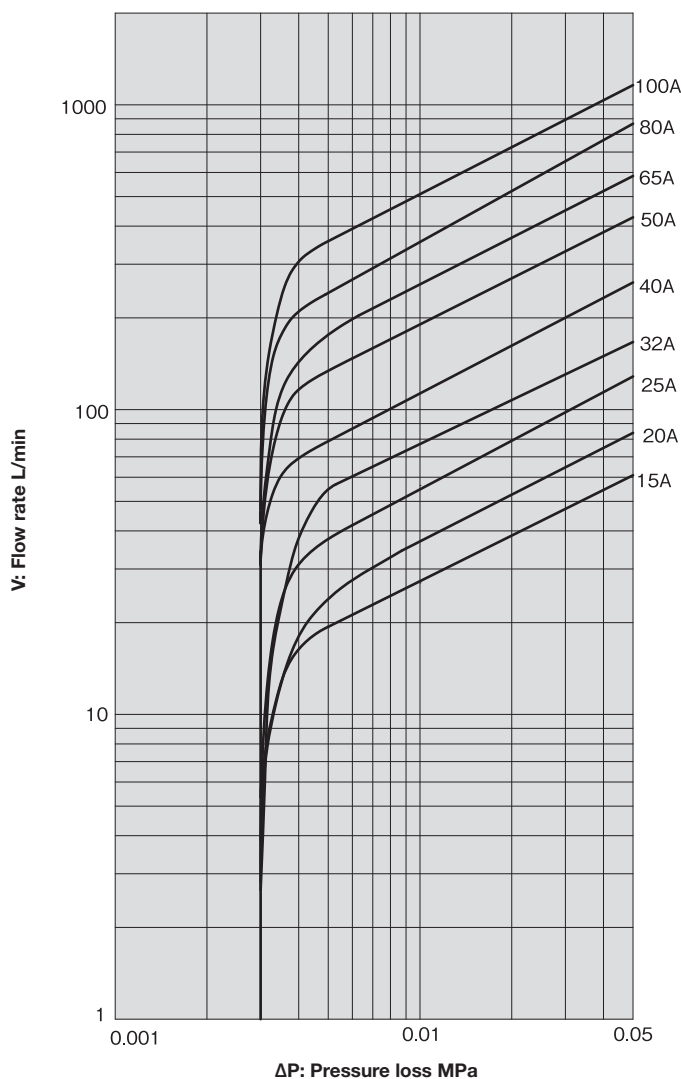
Nominal size	ϕd	L	ϕD	A	Weight
15A	35.0	16.0	43.0	63.0	0.20
20A	45.0	19.5	53.0	69.5	0.30
25A	51.0	22.0	63.0	80.5	0.40
32A	60.5	28.0	72.5	90.5	0.70
40A	70.0	31.5	82.0	101.0	0.90
50A	90.0	40.0	95.5	115.0	1.50
65A	102.0	45.0	116.0	142.0	2.20
80A	121.0	50.0	129.5	153.5	2.90
100A	145.0	60.0	154.5	180.0	4.50



· Concerning with piping, please connect the part of body line shape to the bolt as shown in the figure and please together in the center of products and flange.



■Pressure Loss Chart (For water)



■Overview of Applicable Connection Standard

Nominal size	JIS				ASME				PN (EN/DIN/GB)				
	5K	10K	16K	20K	125lb	150lb	250lb	300lb	6	10	16	25	40
15A	○	○	○	○	×	○	×	○	○	○	○	○	○
20A	○	○	○	○	×	○	×	○	○	○	○	○	○
25A	○	○	○	○	○	○	○	○	○	○	○	○	○
32A	○	○	○	○	○	○	○	○	○	○	○	○	○
40A	×	○	○	○	○	○	○	○	○	○	○	○	○
50A	×	○	○	○	○	○	○	○	○	○	○	○	○
65A	○	○	○	○	○	○	○	○	○	○	○	○	○
80A	×	○	○	○	○	○	○	○	○	○	○	○	○
100A	×	○	○	○	○	○	○	○	×	○	○	○	○

* Mark (○) on the above table are possible piping. Mark (×) are not possible piping.

SCV-4,4EN

SCV-4 check valve prevents backflow of fluid. It is widely used in steam pipelines or cold and hot water pipelines.

■Features

1. The valve body and valve seat are made by stainless steel that have excellent durability.

■Specifications

Model	SCV-4	SCV-4EN
Nominal size	15-50A	15-250A
Application	Steam, Air, Cold and hot water, Oil, Other non-dangerous fluids	
Maximum pressure	1.6 MPa	
Maximum temperature	200°C	300°C
Installation posture	Horizontal, vertical *1	
Connection	JIS Rc, NPT screwed	BS PN16 flanged
Minimum valve	0.05 MPa	
Material	Body	EN-GJL-250 JL1040 (JIS FC250)
	Valve	X20Cr13 1.4021 (JIS SUS420J1)

*1 When installing on vertical piping, please make the flow direction of the fluid from the ground to the top.

- This product is not be disassembled.
- A small amount of fluid leaks at the valve seat. So, it should not be used for applications requiring complete closing.

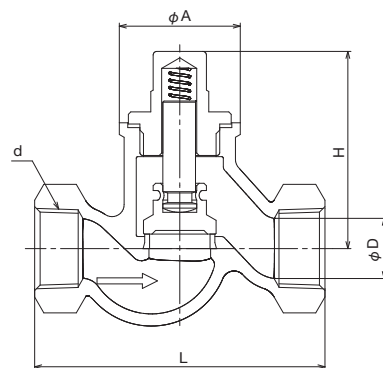
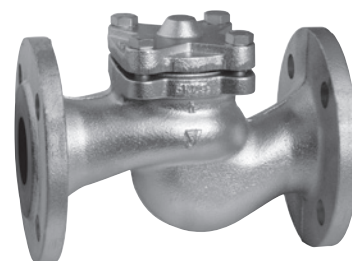
■Dimensions (mm) and Weights (kg)

· SCV-4

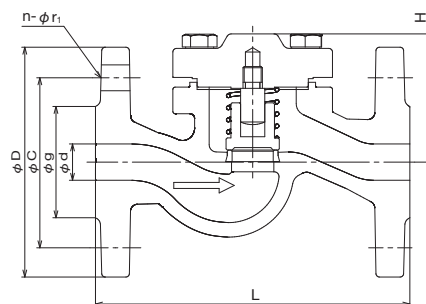
Nominal size	d	H	L	D	A	Weight
15A	NPT 1/2	56	90	15	41	0.7
20A	NPT 3/4	56	100	20	41	0.9
25A	NPT 1	82	120	25	50	1.2
32A	NPT 1-1/4	99	140	32	60	1.7
40A	NPT 1-1/2	112	170	40	68	2.2
50A	NPT 2	121	200	50	84	3.6

· SCV-4EN

Nominal size	d	H	L	Flange BSEN PN16				Weight
				D	C	G	n-h	
15A	15	56	130	95	65	46	4-14	2.1
20A	20	56	150	105	75	56	4-14	2.7
25A	25	67	160	115	85	65	4-14	3.8
32A	32	76	180	140	100	76	4-19	5.5
40A	40	89	200	150	110	84	4-19	7.4
50A	50	96	230	165	125	99	4-19	9.5
65A	65	104	290	185	145	118	4-19	15.0
80A	80	124	310	200	160	132	8-19	20.0
100A	100	161	350	220	180	156	8-19	29.0
125A	125	174	400	250	210	184	8-19	41.0
150A	150	197	480	285	240	211	8-23	66.0
200A	200	248	600	340	295	266	12-23	111
250A	250	295	730	405	355	319	12-28	196

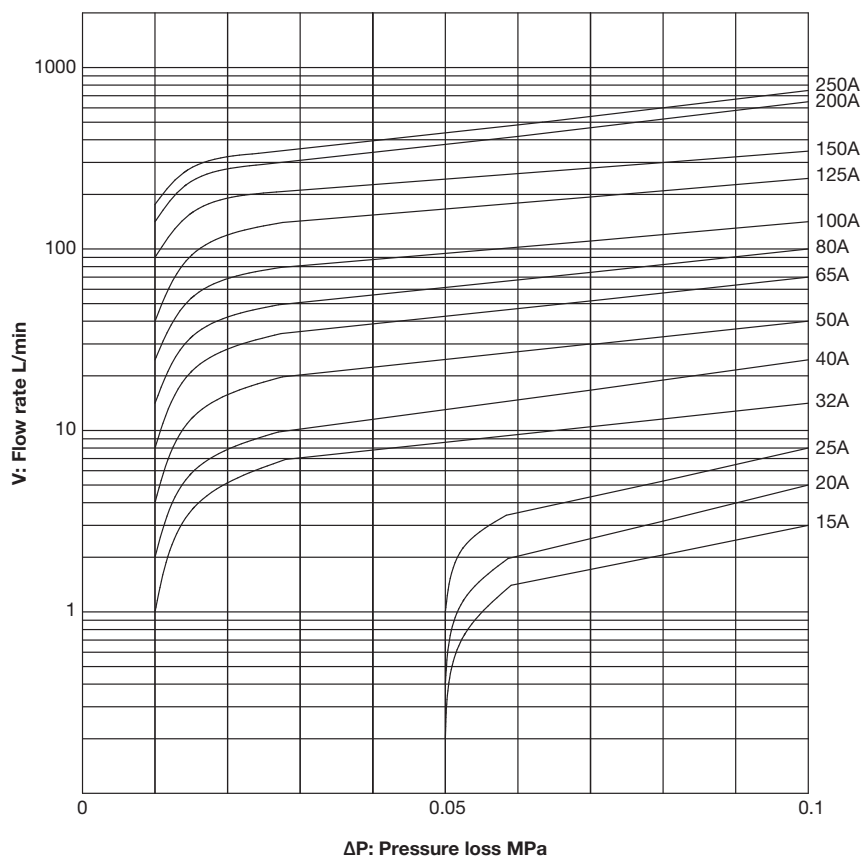


SCV-4



SCV-4EN

■ Pressure Loss Chart (For water)



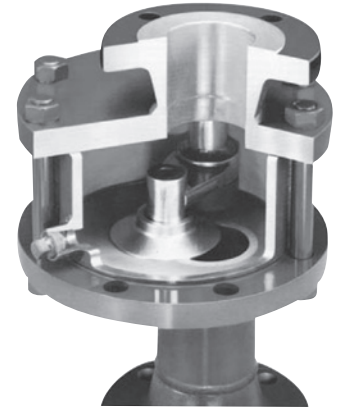
Everlasting Valve

Made-to-Order Product

Unique Valve Structure, able to replace other valves or rotary feeders by resolving dissatisfactory of the conventional valve concern with leak life. Able to operate until Max Pressure 70.3 MPa and Max Temperature 816°C.

■Features

1. With each operation of disc-self rotating, seat lapping condition, enhance air-tight condition of seat surface.
2. Metal to Metal Seating - Abrasion resistance, wide temperature range by adoption of spring loaded connection between disc and drive allowing disc to compensate for thermal expansion or contraction, adjustable for weariness.
3. Smooth the seat surface by rotating and cutting the powder on the seat surface.
4. Wide Surface Seating, keep surface pressure at low and prevent trim wear even in high pressure condition. Allowable leakage class is over ANSI B 16.104 Standard Control Valve [Class VI] .
5. No obstruction to flow. Minimal pressure drop.
6. Hard retention structure of internal valve body. Without losing system even in extracted fixation of fine elements and retention by distillation of fluid.
7. Flat-seating surface, due to minimal parts, simple structure , ease of maintenance, durability.
8. Available to flush valve cavity and internals while in operation.

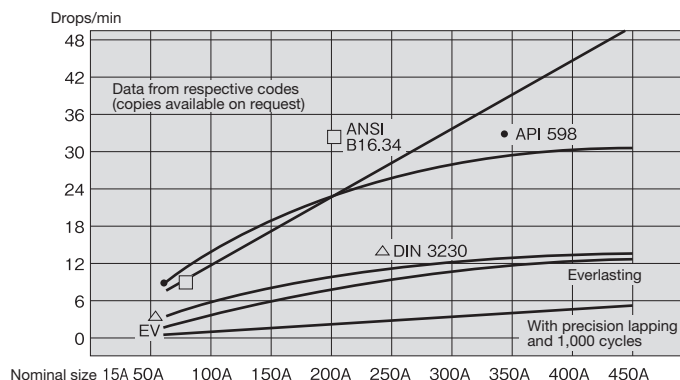


■Specifications

Application		Powder, Slurry, High temperature fluid, High pressure fluid
Size		15-450A
Maximum pressure		Vacuum-70.3 MPa
Maximum temperature		816°C *1
Material	Body	Carbon steel, Stainless steel, Alloys
	Disc & Seat	Stellite, 440 Stainless steel, Tungsten carbide etc
Connection		Screwed: NPT Flanged: ANSI standard (150 lb, 300 lb etc) JIS standard (10 K, 20 K, 30 K etc) Buttweld: ANSI standard JIS standard (SW, BW)
Others (Actuator)		Manual lever, Hand wheel, Air cylinder, Electric etc

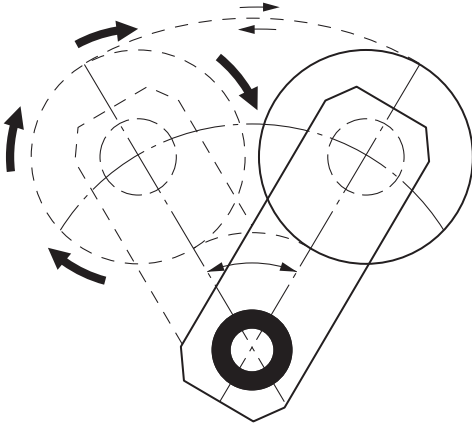
*1 It will be different depending on pressure and material.

■Allowable Leak Rates Shut Off and Isolation Valves



Everlasting valve standard manufacturing practices produce a seal that exceeds ANSI, AP, and DIN criteria.

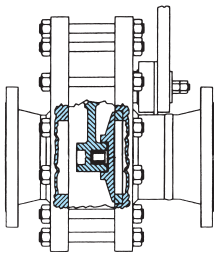
■Operation Principal



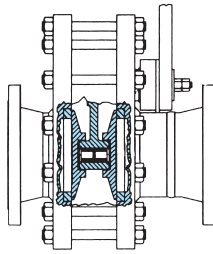
Self lapping

Rotation of disc that produces an action that lapping the seating surface with each operation that cause the seat valve to long lasting tight shut-off.

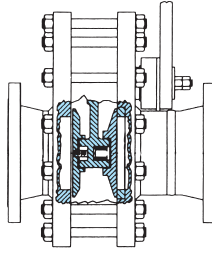
· Disc structure



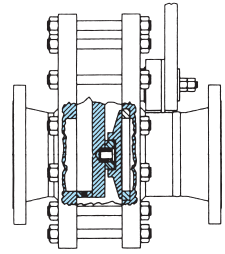
Single disc
[SD] series



Double disc
[DD] series

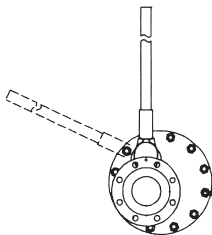


Lens disc
[LD] series

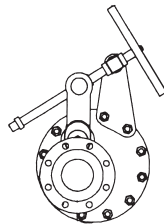


Rock bar disc
[RB] series

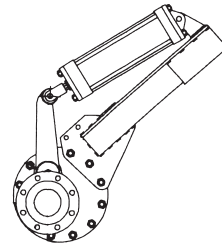
· Examples of actuator



Lever type

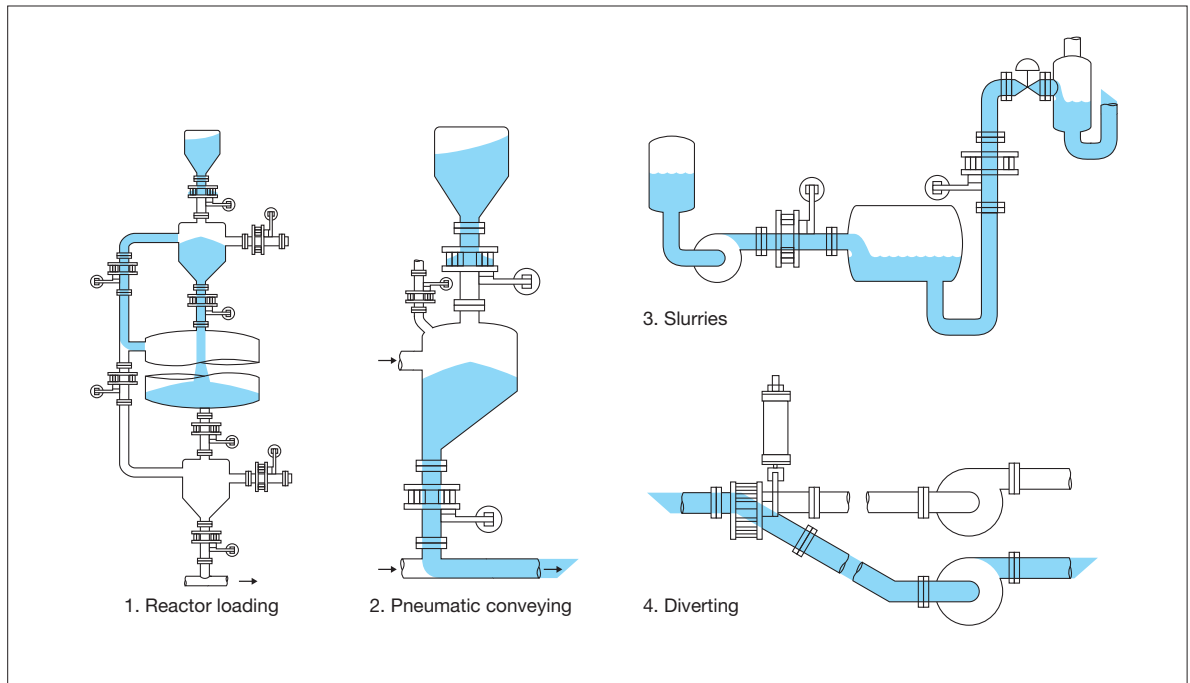


Handle type

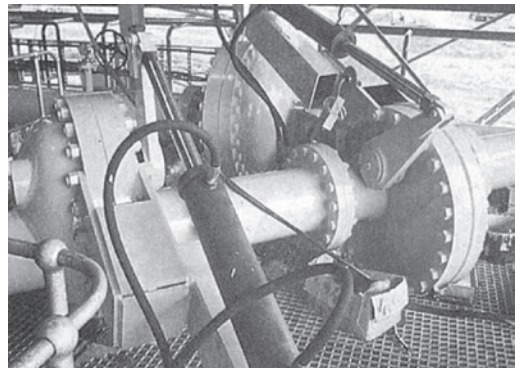
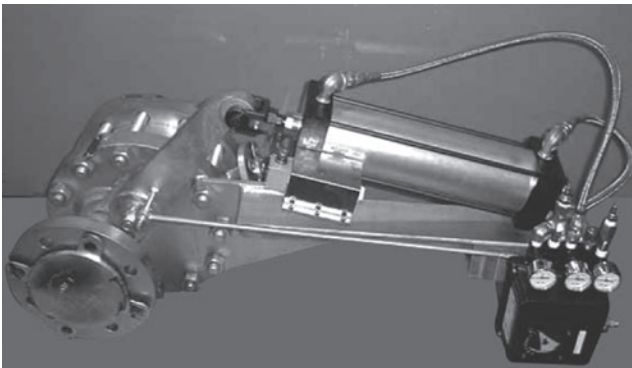


Air cylinder type

■Example of Everlasting Valve Application



Available to select the actuator base on the specifications.



Base on well experience and performance, adopting unique made-to-order system producing the products that selected organizaion of suitable structure and materials requested by customer's specifications.

■Concern with Inquiry

Due to adopting made-to-order system, sufficient specifications are necessary.
Please contact us when you use since we prepare an inquiry sheet at our company.
Please understand in case of taking time for quotation.

“Wear Jacket and save energy”



**Easy handling, Environment-friendly
Comfortable work environment**

**Energy
saving**

Y's Jacket not only reduces energy loss due to heat radiation but eases temperature increase, which reduces load of air conditioner.

**CO₂
emission
cut**

Y's Jacket contributes to reduction of CO2 emission, which is a global goal.

Safety

Y's Jacket prevents accidents of burn or crash, which contributes to safe and comfortable work environment.

Environment

Since Y's Jacket is easy to install for any operator, it can be used many times after maintenance. This will generate no waste and environmentally-friendly.

Y's Jacket

This specially designed jacket completely fits Yoshitake products in use at your site. The energy-saving and CO₂-reduction effects can be estimated prior to order.

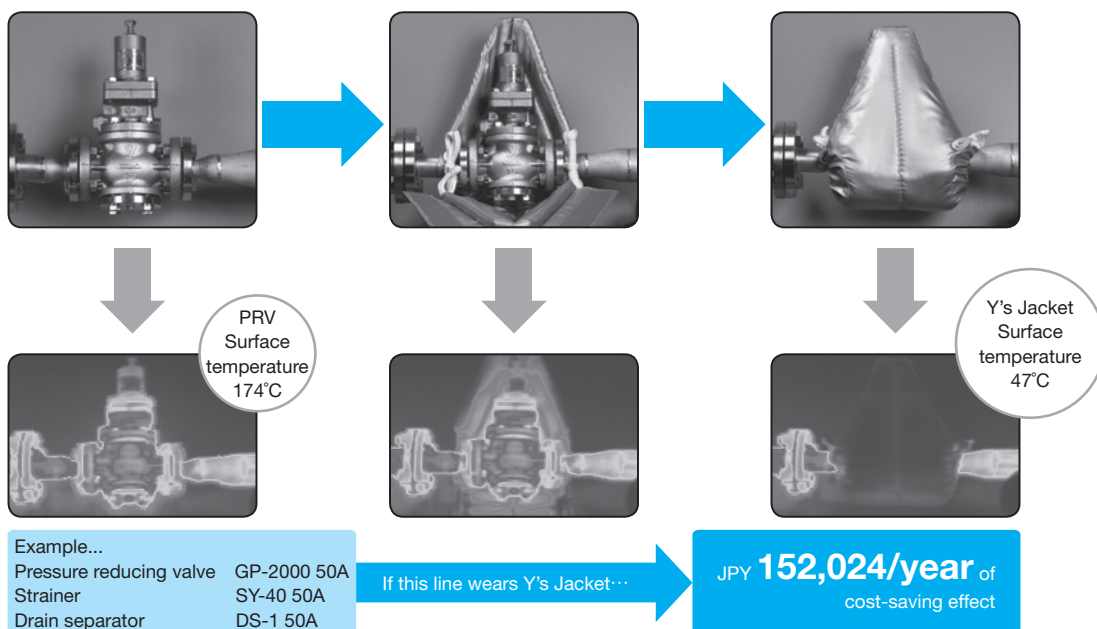
■Features

1. Energy saving
Prevents room temperature rise as well as energy loss caused by heat release.
2. CO₂-reduction effect
Contributes to CO₂-reduction of the global issue.
3. Safety
Prevents accidents, such as burns or bruises and brings a safe and comfortable work environment.
4. Environmental enhancement
Easy to set and reusable after valve maintenance, it produces no waste and thus is environment-friendly.

■Specifications

Material	Surface material	Glass cloth + Silicone coating
	Inner material	Glass cloth + Silicone coating
	Insulating material	Needle punched mat made of glass fiber Thickness: 20 mm
Maximum temperature		250°C

■Effect



Y's Jacket Lineup

Perfect fit for Yoshitake product in use

Lineup of genuine Jacket for Yoshitake products (Please contact us for other products)

■ Pressure reducing valve



■ Strainer



■ Drain Separator



Y's Jacket can be installed and removed easily even for pipe or valves with complicated shape. It can also be used for insulation of general pipes, ordinary valves or whole the equipment.

Lineup of Jacket for general pipes & fittings (Please contact us for other products)

■ Pipe



■ Elbow



■ Tee



CO₂ Emission of current system can be achieved by installing Y's Jacket on uninsulated area.



SP-1

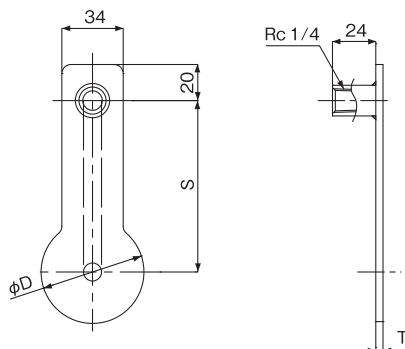
SP-1 Smart Plate is used on airtight test at the time of piping construction. In the traditional process requiring substitute pipes, Smart Plate makes it possible to conduct airtight test effectively and safely.



■Specifications

Model	SP-1
Nominal size	15-150A
Applications	Compressed air, Water and Other non-dangerous fluids
Maximum pressure	1.0 MPa
Connection	JIS Rc 1/4 screwed
Applicable flange	JIS 10K flange
Material	Stainless steel (SUS304)

■Dimensions (mm) and Weights (kg)



Nominal size	D	S	T	Weight
15A	57	95	4	0.18
20A	62	95	4	0.19
25A	74	95	4	0.22
32A	84	105	4	0.25
40A	89	105	4	0.28
50A	104	105	4	0.34
65A	124	115	4	0.45
80A	134	115	4	0.5
100A	159	135	6	1.0
125A	190	155	6	1.4
150A	220	165	8	2.5

■Installation and Usage

In the structure of Smart Plate, vent hole to the inside pipe and socket are connected by duct. Please install on the flange connection part as figure 1 and flow testing fluid.

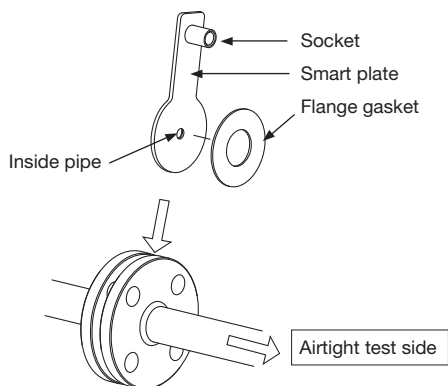
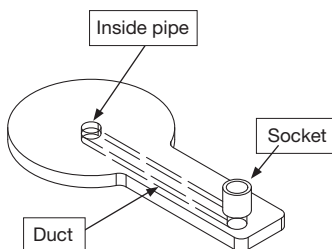
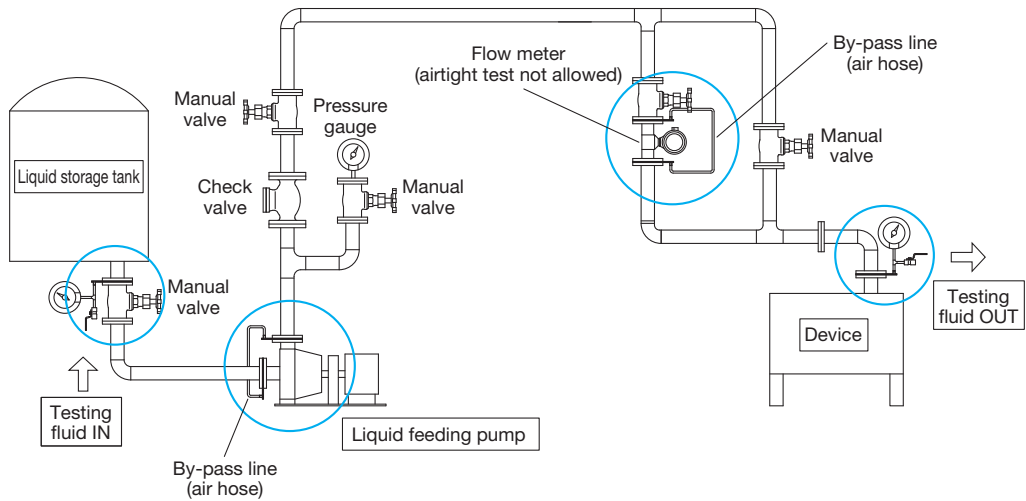


Fig. 1

■SP-1 Installation Diagram Example

When there is device which cannot be involved in airtight test, please connect the by-pass line with air hose etc.



■SP-1 Special Storage Case

SP-1 comes with special storage case. It reduces the risk of breakage or loss during carriage or storage.

■Contents of SP-1 Set

• Set S

Nominal size	15A	20A	25A	32A	40A	50A	Sum
Pieces	4	4	6	2	4	4	24

• Set L

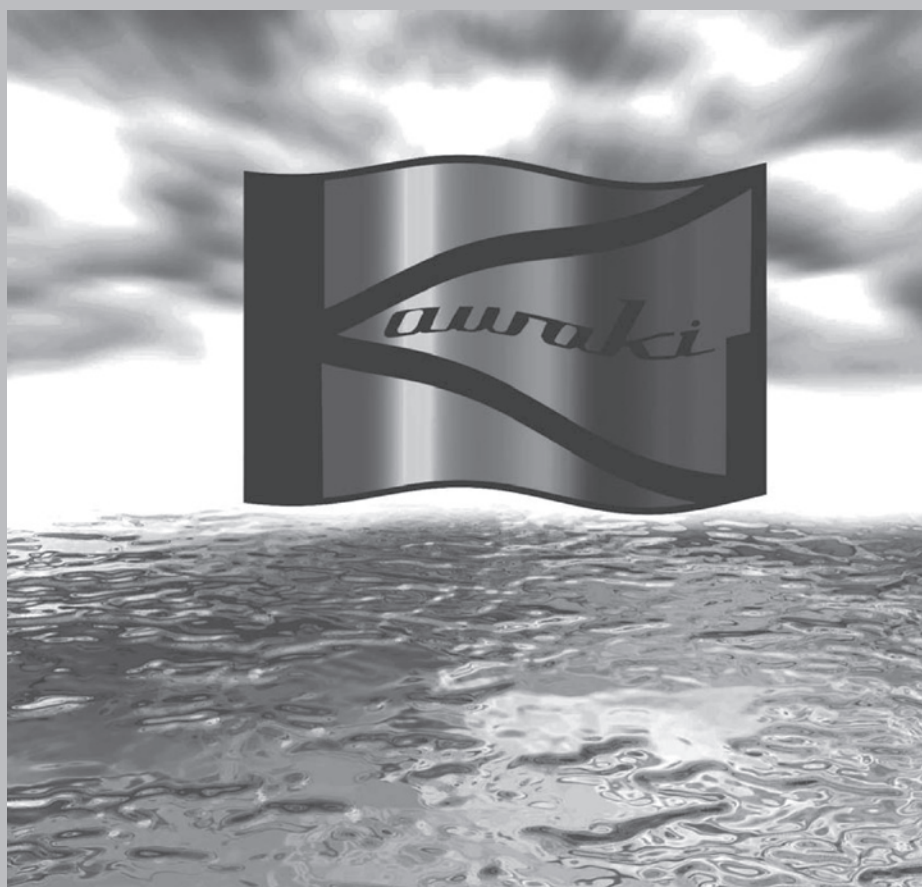
Nominal size	65A	80A	100A	Sum
Pieces	2	4	4	10



SP-1 special storage case



Kawraki



Kawraki

SF FLOW METER & FLOW SWITCH



SF-MA

SF-MA
(water proof type)

- Types: SF-M: Instantaneous flow indicator
 SF-MA: Instantaneous flow indicator + lower (or upper) microswitch
 SF-MAA: Instantaneous flow indicator + lower & upper microswitches

Diameter: 3/8B-12B flanged type
 Rc 3/8-Rc 1-1/2 screwed type
 Withstanding Pressure: Standard: 1.0 MPa
 Special order: 30 MPa
 Temperature: Standard: 80°C or less
 Special order: 300°C or less

Accuracy: $\pm 3\%$ of readings

Contact Capacity:

Microswitches used for contacts are classified into the following three types according to diameter and flow rate:

- 15A: 125, 250 or 480 VAC
- 0.5A: 125 VDC 0.25A: 250 VDC
- 5A: 125 or 250 VAC
- 0.5A: 125 VDC 0.25A: 250 VDC
- 10A: 125 or 250 VAC

Characteristics:

- Most suitable for opaque liquids (oils, etc), high-temperature and high-pressure fluids. No restrictions on flow direction.
- The contact of the SF-MA-MAA standard flow switch is internally variable, but an external variable type can also be manufactured for frequent variations.
- Complete waterproof type (IEC IP67) is also manufactured for outdoor or severe-atmosphere use.

Construction: Body: FC250. CAC406
 SS400. SUS304. SUS316. SUS316L
 Main parts: C3604B
 SUS304. SUS316. SUS316L

Note

- For use in high vibration places, use vibration-proof type.

SA FLOW METER & FLOW SWITCH

(Proximity switches are used for small flow rate)



SA-M

SA-MA
(external variable type)

- Types: SA-M: Instantaneous flow indicator
 SA-MA: Instantaneous flow indicator + lower (or upper) proximity switch contact
 SA-MAA: Instantaneous flow indicator + lower & upper proximity switch contacts

Diameter: 3/8B-1B flanged type
 Rc 3/8-Rc 1 screwed type
 Withstanding Pressure: Standard: 1.0 MPa
 Temperature: Standard: 80°C or less
 Special order: 300°C or less

Accuracy: $\pm 3\%$ of readings

Contact Capacity: 50 W: 0.5A, 125 VAC
 Self-holding proximity switch

Characteristics:

- Most suitable for relatively small flow rates (0-15 L/min in water) of opaque liquids (oils, etc.), high-temperature and high-pressure fluids.
- No restrictions on the flow direction.

Construction: Body: FC250. CAC406
 SS400. SUS304. SUS316. SUS316L
 Main parts: C3604B
 SUS304. SUS316. SUS316L

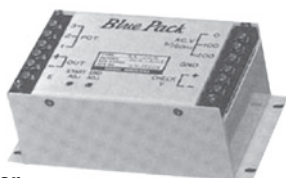
Note

- For use in high vibration places, use vibration-proof type.

SH FLOW METER (SF Type with Electronic Transmitter)



Transmitter



Converter



Indicator

This flow meter is an SF type incorporating a transmitter that transmits instantaneous flow rates. Characteristics etc., are the same as those of the SF type.

Diameter: 3/8B-12B flanged type

Rc 3/8-Rc 1/2 screwed type

Withstanding Pressure: 1.0 MPa

Accuracy: $\pm 3\%$ of readings

Power Source: 100 V / 200 VAC, 12 V / 24 VDC

Output: 4-20 mA DC, 1-5 V DC

Structure of Transmitter:

Body: FC250. CAC406. SUS304. SUS316. SUS316L

Main parts: C3604B. SUS304. SUS316. SUS316L

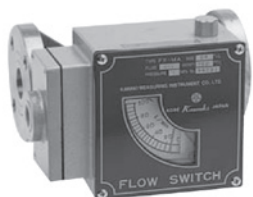
FY FLOW METER & FLOW SWITCH (Compact SF Type)



FY-M



FY-MA



FA-MA
(external variable type)

Types: FY-M: Instantaneous flow indicator

FY-MA: Instantaneous flow indicator + lower (or upper) microswitch

Diameter: 3/8B-5B flanged type

Rc 3/8-Rc 1-1/2 screwed type

Withstanding Pressure: 1.0 MPa

Temperature: Standard: 80°C or less

Accuracy: $\pm 3\%$ of readings

Contact Capacity: 5A: 125 or 250 VAC

0.5A: 125 VDC 0.25A: 250 VDC

Characteristics:

- Most suitable for opaque liquids (oils, etc), high-temperature and high-pressure fluids. No restrictions on flow direction.
- Available with external contact variable type.

Construction: Body: FC250. CAC406. SUS304

Main parts: C3604B. SUS304

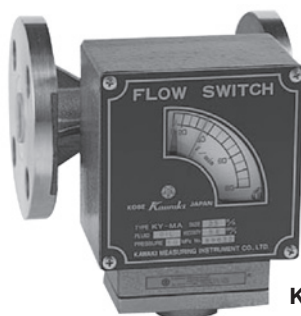
Note

- For use in high vibration places, use vibration-proof SF type.
- For 1.0 MPa or higher operating pressure, use the SF type designed for high pressure.
- Complete waterproof type (IEC IP67) is also manufactured for outdoor or severe-atmosphere use.

KY FLOW METER & FLOW SWITCH



KY-M



KY-MA

Types: KY-M: Instantaneous flow indicator

KY-MA: Instantaneous flow indicator + lower (or upper) microswitch

Diameter: 3/8B-5B flanged type

Rc 3/8-Rc 1-1/2 screwed type

Withstanding Pressure: 1.0 MPa

Temperature: 80°C or less

Accuracy: ±5% of reading

Contact Capacity: 15A: 125, 250 or 480 VAC

0.5A: 125 VDC 0.25A: 250 VDC

Applications:

Most suitable for flow rate indications and alarms for lubricating oil and fluids containing iron powder.

Characteristics:

- Most suitable for opaque liquids because the indicating section is mechanically sealed from fluid.
- No restrictions on the flow direction.
- The contact position is variable.

Construction:

Body: FC250, CAC406, SUS304

Main parts: C3604B, SUS304

Note

- For use in high vibration places, use vibration-proof SF type.
- For 1.0 MPa or greater operating pressure, use the SF type designed for high pressure.
- The scale range is 0-30 L/min in water terms, and 0-20 L/min in oil terms.

FLOW KILLER (Thermistor Flow Meter)



FK

Type: FK

This flow meter, using thermistor characteristics, has no movable parts structurally. Fluids to be measured include water or aqueous solutions.

Diameter: 1B-12B flanged type

Operating Pressure: 1.0 MPa

Withstanding Pressure: 1.5 MPa

Liquid Temperature: 0-80°C

Ambient Temperature: -20°C to +60°C

Accuracy: ±3% FS

Indication: LED

Output: 4-20 mA DC, two switching points: S₁ and S₂ can be set independently.

Power Source: 100, 200 VAC

Characteristics:

- Little or no trouble and no pressure loss because there are no movable parts.
- No restrictions on installation of piping, allowing horizontal and vertical piping (in a full condition).
- This flow meter can be used in magnetic fields because of LED indication, and can be used for pure water measurement.
- The waterproof class is IEC IP67 and can be used outdoors.

RIVER FLOW (Gear Type Flow Meter)

●RF- I : Field Indication Type (Instantaneous + Integrated Indication)

This compact high-precision flow meter measures not only water and oils, but also chemicals. The rotations of two three-lobe elliptic gears output signals directly proportional to flow rates. Receiving the signals, the indicator provides field indication of instantaneous flow rates or integrated flow rates.



RF-I



G36-301



RF-S

RF-I-S

Diameter: Rc 1/8-Rc 3/8

Operating Pressure: 1.0 MPa

Withstanding Pressure: 1.5 MPa

Liquid Viscosity: 1,000 mm²/s or less

Ambient Temperature: -5°C to +40°C

Liquid Temperature: 0-80°C

Operating Humidity: 45-85% RH

Accuracy: ±1%

Indication: Instantaneous flow rate indication: 4 digits
Integrated flow rate indication: 8 digits

●RF- II : Electronic Transmission Type

Field indication type (integrated type)

Remote transmission type (separate type)

(instantaneous + integrated indication + analog output + high/low alarm contact)

Pulse (contact) signals from the transmitter (RF-S) can be output variously by using a converter in accordance with the application. Available with integrated type (RF- II) in which the transmitter (sensor section), converter and indicating section are integrated, and separate type (RF- II-S).



RF-II



KSP-582



RF-S

RF-II-S

Power Source: AC 100 V / 200 V ±10%

DC 12 V / 24 V (option)

Output Signals: Current Output: 4-20 m ADC

Voltage Output: 0-1 V, 0-5 V, 0-10 V, 1-5 V

Relay Output: Instantaneous high/low alarm contact

RFH for High-Viscosity and High-Pressure Fluids

(Instantaneous + Integrated Indication)



RFH

This RIVER FLOW is modified for high-viscosity and high-pressure fluids, which is most suitable for measuring the flow rates of greases, and in hydraulic circuits of construction equipment, earthmoving equipment, etc.

Diameter: Rc 1/4-Rc 1/2

Operating Pressure: 21 MPa

Withstanding Pressure: 31 MPa

Operating NLGL No. and Consistency: NLGL: NLGL NO. 066-6

Consistency range: 85-475

Ambient Temperature: -5°C to +40°C

Liquid Temperature: 0°C to 80°C

Accuracy: ±1%

Indication: Instantaneous flow rate indication: 4 digits

Integrated flow rate indication: 8 digits

Characteristics:

- No restrictions on the installation location in piping lines as it can be used in 21 MPa oil pressure lines.
- Can be used for grease of any consistency.
- Can also be used as a stroke gauge on construction equipment, earthmoving equipment, etc.

FS-C / FS-N SIGHT FLOW INDICATORS WITH NEEDLE VALVE



FS-C



FS-N

Types: FS-C: The capped needle valve prevents access by unauthorized personnel after setting the oil level.

FS-N: The needle valve is a vibration-proof 2.0 MPa type, allowing high-precision adjustment of trace amounts.

Diameter: FS-C: Rc 1/4 to Rc 1-1/2

FS-N: Rc 1/4 to Rc 1

Withstanding Pressure: 1.0 MPa

Temperature: 80°C or less

Construction:	FS-C: Flow sight body	FCD450
	main parts	C2801P
	Needle valve body	CAC406
	main parts	C3604B
	FS-N: Flow sight body	FCD450
	main parts	C2801P
	Needle valve body	C3771B
	main parts	C3604B

Note

- In order to prevent damage to window glass, the FS-K type, complying with fire laws, with a steel protective cover and with no window glass, is also available. For small flow rates and for measuring deep-black oils, use the FS-O type.

FI SIGHT FEED INDICATOR



FI

Types: FI-1 to FI-12

The flow direction is from side to bottom, and the inlet side is provided with a needle valve so that oil amounts can be controlled.

Diameter:	Inlet	Outlet	
FI-1:	Rc 1/4	× Rc 1/2	max. flow rate 3 L/min.
FI-2:	Rc 3/8	× Rc 1/2	max. flow rate 3 L/min.
FI-3:	Rc 1/2	× Rc 1/2	max. flow rate 3 L/min.
FI-4:	Rc 1/4	× Rc 3/4	max. flow rate 5 L/min.
FI-5:	Rc 3/8	× Rc 3/4	max. flow rate 5 L/min.
FI-6:	Rc 1/2	× Rc 3/4	max. flow rate 5 L/min.
FI-7:	Rc 3/4	× Rc 3/4	max. flow rate 5 L/min.
FI-8:	Rc 1/4	× Rc 1	max. flow rate 5 L/min.
FI-9:	Rc 3/8	× Rc 1	max. flow rate 5 L/min.
FI-10:	Rc 1/2	× Rc 1	max. flow rate 5 L/min.
FI-11:	Rc 3/4	× Rc 1	max. flow rate 5 L/min.
FI-12:	Rc 1	× Rc 1	max. flow rate 10 L/min.

Withstanding Pressure: 1.0 MPa

Temperature: 80°C or less

Construction: Body: AC-8BT6
Main parts: C3604B
Needle valve: SUS304

Note

- In order to prevent damage to the window glass, a steel-protective-cover-equipped type, complying with fire laws, is also manufactured.

KFS FLOWING INDICATOR



KFS

Types: KFS

The flow direction is from bottom to top, and the inlet side is provided with a needle valve so that oil amounts can be controlled. Rough flow rates can be known from the float moving up and down according to changes in oil level.

Diameter: Inlet Rc 3/8 × Outlet Rc 3/8

Flow rate: 0-0.5 L/min. at 150 mm²/s & 0.2 MPa

Withstanding Pressure: 0.5 MPa

Temperature: 80°C or less

Construction: Body: SS400
Main parts: S25C
Float: C3604B

Note

- A 3-4 point flow rate scale is optionally available.

MFI MULTIPLE SIGHT FLOW INDICATORS



MFI-6-15

Types: MFI-1 to MFI-10 (1-10 Sights)

Diameter: Inlet Rc 3/8-Rc 3/4

Outlet Rc 3/8

Flow rate: 0-6 L/min. at 220 mm²/s & 0.2 MPa

Withstanding Pressure: 0.5 MPa

Temperature: 80°C or less

Construction: Body: SS400. C3604B. SUS304

Main parts: S25C. C3604B. SUS304

Float: C3604B. SUS304

Note

· A 3-4 point flow rate scale is optionally available.

B-MFI BLACK MULTIPLE SIGHT FLOW INDICATORS



B-MFI-3-15

The multiple sight flow indicators of this type are for black lubricating oils.

The flow rates of oils, the indications of which are difficult to see for the MFI type, can clearly be seen because of indications out of contact with liquids.

Types: B-MFI-1 to B-MFI-10 (1-10 Sights)

Diameter: Inlet Rc 1/2, Rc 3/4

Outlet Rc 3/8

Flow rate: Inlet Rc 1/2

0-3 L/min at 320 mm²/s & 0.2 MPa

Inlet Rc3/4

0-5 L/min at 320 mm²/s & 0.2 MPa

Withstanding Pressure: 0.1 MPa

Temperature: 80°C or less

Construction: Block: body: SS400. C3604B

Flow sight: body: CAC406

main parts: C2801P

Needle valve: body: CAC406

main parts: C3604B

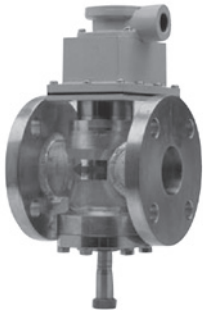
Note

· A 3-4 point flow rate scale is optionally available.

NF FLOW SWITCH



NF- I



NF- II (waterproof Type)

This flow switch, working as a water (oil) failure/reduction relay, is used for detection and check of flow rates of cooling water, oils, etc.

Types: NF- I (fixed contact type)

The set point cannot be moved.

NF- II (variable contact type)

The set point can be moved.

Diameter: 3/8B-3B flanged type

Rc 3/8-Rc 2 screwed type

Withstanding Pressure: 1.0 MPa

Temperature: 80°C or less

Contact Capacity: 15A: 125, 250 or 480 VAC

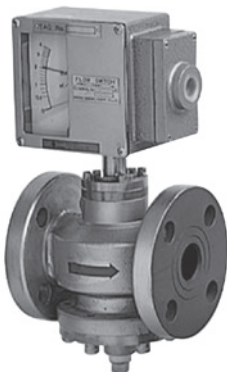
0.5A: 125 VDC 0.25A: 250 VDC

Construction: Body: FC250. CAC406. SS400. SUS304.

SUS316. SUS316L

Main parts: C3604B. SUS304. SUS316. SUS316L

INF FLOW METER & FLOW SWITCH



INF-MA

This flow meter & flow switch is an NF flow switch equipped with an indicator.

Though an area flow meter, it is a compact flow meter that can measure the flow rates of liquids and gases in horizontal piping.

Type: INF-M: Instantaneous flow rate indicator

INF-MA: Instantaneous flow rate indicator +1 contact

Diameter: 3/8B-3B flanged type

Rc 3/8-Rc 2 screwed type

Withstanding Pressure: 1.0 MPa

Temperature: 80°C or less

Contact Capacity: 5A: 125 or 250VAC

0.5A: 125 VDC 0.25A: 250VDC

Construction: Body: FC250. CAC406. SS400. SUS304.

SUS316. SUS316L

Main parts: C3604B. SUS304. SUS316. SUS316L

CY FLOW SWITCH (Flow Switch for Unfilled Conditions)



CY- I

This flow switch is most suitable for unfilled return oil (water) piping in which the piping is not filled with oil (water). This includes a needle for variable contact, the adjustment of which allows variations of the set flow rate.

Type: CY- I Standard type

Direction of flow: Side → bottom

Diameter: 3/8B-6B flanged type

Withstanding Pressure: 0.5 MPa

Temperature: 80°C or less

Contact Specifications: For 220 VAC as standard.

Max. contact capacity: 50 VAAC, 50 WDC

Max. operating current: 0.5 AAC, 0.5 ADC

Max. operating voltage: 300 VAC, 300 VDC

Max. contact resistance: 0.1Ω

Construction: Body: SS400. SUS304. SUS316

Main parts: C3604B. SUS304. SUS316

SR FLOW METER



SR- I



SR- III



SR- II

Types: SR- I : Ribbed Pyrex glass tapered tube flow meter

SR- II : Inorganic glass tapered tube flow meter

SR- III : Methacrylic resin tapered tube flow meter

Diameter: SR- I : 3/8B-2B flanged type

SR- II : 3/8B-2B flanged type

SR- III : 3/8B-3B flanged type

Withstanding Pressure: SR- I : 3/8B-3/4B 1.0 MPa

1B-2B 0.7 MPa

SR- II : 3/8B-3/4B 1.0 MPa

1B-3B 0.7 MPa

SR- III : 3/8B-3/4B 1.0 MPa

1B-3B 0.7 MPa

Temperature: SR- I : 80°C or less

SR- II : 60°C or less

SR- III : 50°C or less

Accuracy: ±2% FS

Construction: Body: FC250. SS400. SUS304. SUS316. SUS316L. PVC

Float: SUS304. SUS316. SUS316L. PTFE. PVC. Ti

Stay: SS400. SUS304. SUS316

TR FLOW METER (Simple Type)

TR- I

TR- III

Types: TR- I : Pyrex glass tapered tube flow meter

TR- III: Methacrylic resin tapered tube flow meter

Diameter: TR- I : Rc 1/4-Rc 3/4

TR- III: Rc 1/4-Rc 3/4

Withstanding Pressure: TR- I : 1.0 MPa

TR- III: 1.0 MPa

Temperature: TR- I : 80°C or less

TR- III: 50°C or less

Accuracy: ±2% FS

Construction: Body: C3604B, SS400, SUS304, SUS316

Float: SUS304, SUS316, PTFE, PVC, Ti

Outer casing: SGP, SUS304TPA, SUS316TPA

SR-II-P FLOW METER (Panel Type)

SR- II -P-N

This SR flow meter for relatively small flow rates is modified for panel mounting or a stand type.

The outlet side or inlet side can also be equipped with a flow control needle valve.

Diameter: Rc 1/4-Rc 1/2

Flow rates: Gas (air) max. Liquid (water) max.

Rc 1/4 1 L/min-10 L/min 30 cc/min-300 cc/min

Rc 3/8 3 L/min-30 L/min 0.1 L/min-1 L/min

Rc 1/2 10 L/min-100 L/min 0.3 L/min-3 L/min

Withstanding Pressure: 1.0 MPa

Temperature: 60°C or less

Accuracy: ±2% FS

Construction: Body: C3604B, SUS304, SUS316, PVC

Float: SUS304, SUS316, PTFE, PVC, Glass

KNR FLOW METER (Purge Meter)

This glass tapered tube flow meter measures micro flow rates of gases and liquids as it is mounted on a panel, directly mounted to piping, or mounted on a stand to monitor the flow rates of analytical instruments and measuring instruments.



KNR-3200



KNR-4000

	Without valve	With valve
Types:	KNR-100	KNR-100V
	KNR-1125	KNR-1225
	KNR-1150	KNR-1250
	KNR-1175	KNR-1275
	KNR-3100	KNR-3200
	KNR-4000	
	KNR-5000	

Diameter: Rc 1/8, Rc 1/4, Rc 1/2

Flow rates:	Rc 1/8	Gas	Liquid
	KNR-100	30-300 cc/min	
	KNR-1125	150-1,500 cc/min	5-50 cc/min
	KNR-1150	150-1,500 cc/min	5-50 cc/min
	KNR-1175	0.5-5 L/min	20-200 cc/min
	Rc 1/4		
	KNR-3100	10-100 L/min	0.3-3 L/min
	KNR-4000	10-100 L/min	0.3-3 L/min
	Rc 1/2		
	KNR-5000	30-300 L/min	2.5-25 L/min

Withstanding Pressure: 1.0 MPa

Temperature: 60°C or less

Accuracy: ±2% FS

Construction: KNR-100. KNR-1125 KNR-3100. KNR-4000
KNR-1150. KNR-1175 KNR-5000

Body: C3604B

Jurakon, PVC

Float: Carbon ball, SUS304

Glass, SUS304

Tapered tube: Hard glass

Pyrex

PMF/MMF FLOW METER

**PMF****MMF**

Types: PMF: Panel-mounted type

MMF: Metal-tube area mini flow meter

Diameter: 1/2B-1B flanged type

Rc 1/2-Rc 1 screwed type

Flow rates:	Gas	Liquid
1/2B	10 L/h-100 L/h	0.3-3 L/h
3/4B	0.2 m ³ /h-2 m ³ /h	10-100 L/h
1B	2.5 m ³ /h-25 m ³ /h	120-1,200 L/h

Withstanding Pressure: 1.0 MPa

Special specifications up to 30 MPa can be manufactured.

Temperature: 100°C or less

Special specifications up to 300°C can be manufactured.

Accuracy: ±3% FS

Construction: Body: SUS304. SIS316

Main parts: SUS316. Ti

SMF FLOW METER (Metal-tube Area Type)

**SMF-V**

Types: SMF-B: Flow direction: Bottom → Side

SMF-V: Flow direction: Bottom → Top

SMF-H: Flow direction: Horizontal

Diameter: 1/2B-8B flange type

Withstanding Pressure: 1.0 MPa

Special specifications up to 50 MPa can be manufactured.

Temperature: 100°C or less

Special specifications up to 400°C can be manufactured.

Accuracy: ±2% FS

Construction: Body: SS400. SUS304. SUS316. PVC

Main parts: SUS304. SUS316. PVC

SMC FLOW METER (Compact Type)

**SMC-V**

Types: SMC-B: Flow direction: Bottom → Side

SMC-V: Flow direction: Bottom → Top

SMC-H: Flow direction: Horizontal

Diameter: 1/2B-2B flanged type

Withstanding Pressure: 1.0 MPa

Temperature: 100°C or less

Accuracy: ±2% FS

Construction: Body: SS400. SUS304. SUS316

Main parts: SUS304. SUS316. Ti

STF FLOW METER



This area flow meter using a metal tapered tube, was developed specifically for measuring slurry fluids. This flow meter, using a ribbed glass tube for the indicating section, can also measure opaque liquids such as sludge, and does not cause a condition where the indication is difficult to read due to adhesion of scales, etc.

Diameter: 1/2B-8B flanged type

Withstanding Pressure: 0.7 MPa

Temperature: 80°C or less

Accuracy: $\pm 2\%$ FS

Construction: Body: SS400. SUS304. SUS316. SUS316L

Main parts: SUS304. SUS316. SUS316L

Liquid-contact lining: Rubber

Epoxy resin

PVC

STF-T FLOW METER



This STF flow meter provided with an air chamber between the connecting section and indicating section, was manufactured specifically for slurry fluids. Structurally, slurries have difficulty entering the indicating section even if large amounts of sand, dust, etc. are mixed in fluids.

Diameter: 1/2B-8B flanged type

Withstanding Pressure: 0.7 MPa

Temperature: 80°C or less

Accuracy: $\pm 2\%$ FS

Construction: Body: SS400. SUS304. SUS316. SUS316L

Main parts: SUS304. SUS316. SUS316L

Liquid-contact lining: Rubber

Epoxy resin

PVC

STF-S FLOW METER



This flow meter uses a metal tapered tube with the indicating section magnet-coupled out of liquids to be measured. There are two types: **STF-S- I** transmitting from remote locations through conversion into linear analog pneumatic signals between 0.02 and 0.098 MPa by pneumatic transmitter incorporated in the indication case, and **STF-S- II** transmitting electric signals.

Types: STF-S(A): Instantaneous field indication (with contact)
 STF-S-T: Instantaneous field indication +field integration
 STF-S- I : Instantaneous field indication +pneumatic transmission
 STF-S- II : Instantaneous field indication +electric transmission

Diameter: 1/2B-8B flanged type

Withstanding Pressure: 1.0 MPa

* Those for high pressure are also available.

Temperature: 80°C or less

Accuracy: $\pm 2\%$ FS

Construction: Body: SS400
 SUS304. SUS316. SUS316L

Main parts: SUS304. SUS316. SUS316L

STF-H FLOW METER



The measurement principles of this flow meter use the same as that of the SR flow meters, except that the tapered tube section is made of metal for high-temperature and high-pressure opaque liquids with the indicating section taken at the top.

Diameter: 1/2B-6B flanged type

Withstanding Pressure: 0.7 MPa

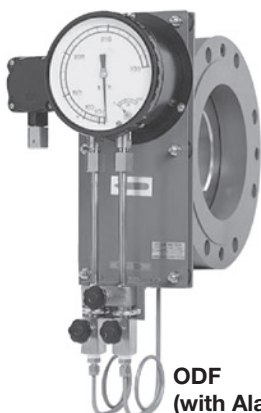
Temperature: 80°C or less

Accuracy: $\pm 2\%$ FS

Construction: Body: SS400
 SUS304. SUS316. SUS316L

Main parts: SUS304. SUS316. SUS316L

ODF ORIFICE FLOW METER



ODF
(with Alarm Contact)

This flow meter measures the fluctuations the pressure difference developing before and after the orifice by the differential pressure gauge, and indicates the flow rates. This differential pressure gauge can also be equipped with an alarm contact that allows remote transmission.

Diameter: 1B-20B flanged type

Fluids: Liquids and gasses

Withstanding Pressure: 1.0 MPa

Temperature: 80°C or less

Construction: Measuring Section: SS400. SUS304. SUS316.
SUS316L. P.V.C

Indicating Section: SUS316

PU U-TUBE DIFFERENTIAL PRESSURE GAUGE



PU

This U-tube differential pressure gauge measures the pressure difference between the inlet pressure and outlet pressure, which is most suitable for measuring the micro pressure difference of an orifice, duct, etc. Those for H₂O, Hg, oils, etc., are available. Specify the liquid to be measured.

Construction: Body: Wood
SS400

Liquid-contact section: C3604B
SS400
SUS304

Measuring tube: Pyrex glass
Methacrylic resin

Measuring range: ±1 kPa to ±20 kPa

PT LIQUID COLUMN PRESSURE GAUGE



PT

This liquid column pressure gauge is provided with a tank at the back and coupled at the lower end to measure the pressure difference for simplifying the measurement of the U-tube differential pressure gauge. Those for H₂O and Hg are available. When ordering, specify which one.

Measuring Range: 0-40 kPa

Construction: Body: SS400

Liquid-contact section: C3604B
SS400
SUS304

FR AUTOMATIC FLOW CONTROL VALVE



FR-S

This constant flow control valve maintains the outlet flow rate constant even if the inlet pressure fluctuates.

Applications: For maintaining feed oil (water) constant.
For protection including prevention of excessive flow rates, and functioning as a safety valve when hydraulic piping or the like bursts.
For uniform water supply equipment, and maintain flow rates constant in other cases.

Diameter: 3/8B to 2-1/2 flanged type

Rc 3/8-RC 1-1/2 screwed type

Withstanding Pressure: 2.0 MPa-25 MPa

Temperature: 80°C or less

Construction: SS400. C3604B. SUS304

SV SAFETY VALVE (for High Pressure)



SV- II

Types: SV- I : Diameter Rc 3/4
Maximum pressure 21 MPa
SV- II : Diameter Rc 1
Maximum pressure 11 MPa

Withstanding Pressure: 31.5 MPa

Operating Fluids: Oils

Characteristics:

- Its special valve structure has good response characteristics to severe blowouts.
- The high quality material of the spring assures excellent reproducibility of the set pressure.
- Through designed to resist high pressure, it is compact and low-priced.

Construction: Body: SS400
Main Parts: SUS304
Spring: SWOCV-V

CV RUGGED CHECK VALVE (for High Pressure)



CV- I

Types: CV- I : Diameter 2B
CV- II : Diameter 4B
CV- III : Diameter 6B

Operating Pressure: 11 MPa

Withstanding Pressure: 18 MPa

Characteristics:

- Reliable and quiet operation.
- Lightweight compared with other products.
- Low-priced and quick delivery.

Construction: Body: SS400
Main parts: SUS304

MS-FLOW METER OF NON-SPRING DYNAMIC PRESSURE PLATE TYPE

(Japanese Utility Model No.2004042)

**Standard flow meter****High-pressure flow meter****Magnetic shielding flow meter**

This flow meter has been developed for the purpose of measuring corrosive fluids (plating liquids, etc.)

Conventionally, spring-incorporated or metal tapered tube flow meters would be used for measuring this kind of liquid, but the main parts of the flow meters would seriously deteriorate over time, and their service lives are extremely short due to corrosive fluids. This flow meter, having been then developed, operated on an absolutely physical principle, and it is highly durable, and its performance will not deteriorate when used with corrosive fluids.

Diameter: 2B-8B flanged type

Temperature: 80°C or less (non-freezing)

Acid Resistance: PH1-7

Withstanding Pressure: 0.3 MPa

* 0.5 MPa can also be ordered specially.

Characteristics:

- Most suitable for measuring corrosive fluids (plating liquids, etc.)
- Contaminated liquids can clearly be measured because of the indicating section out of contact with the liquid.
- The scale is relatively linear because it is balanced by using a special toggle link mechanism relative to the fluid energy.
- The absolutely physical flow meter hardly deteriorates over time.
- The flow meter is compact and lightweight.
- There are three flow directions: horizontal; left ⇔ right, and from bottom to top. The flow direction from top to bottom is not available.
- Can also be used in magnetic fields by using a magnetic shielding case.

Construction: Body: HTPVC (FRP lining)

Main parts: Ti. SUS16. SUS316L