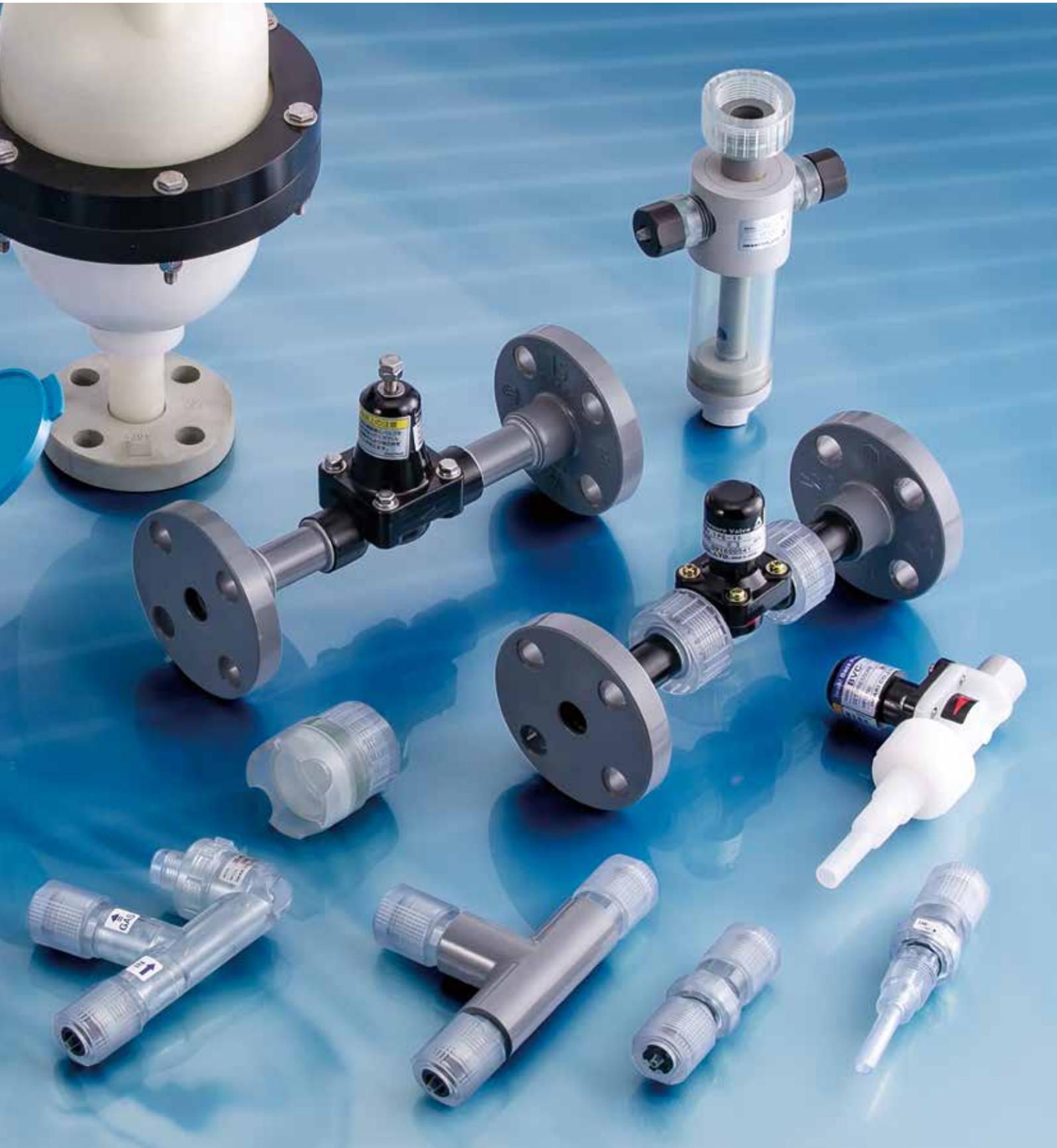
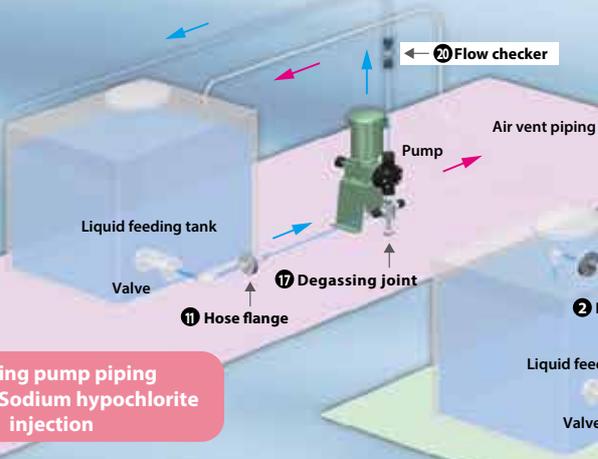


# Accessories General Catalog

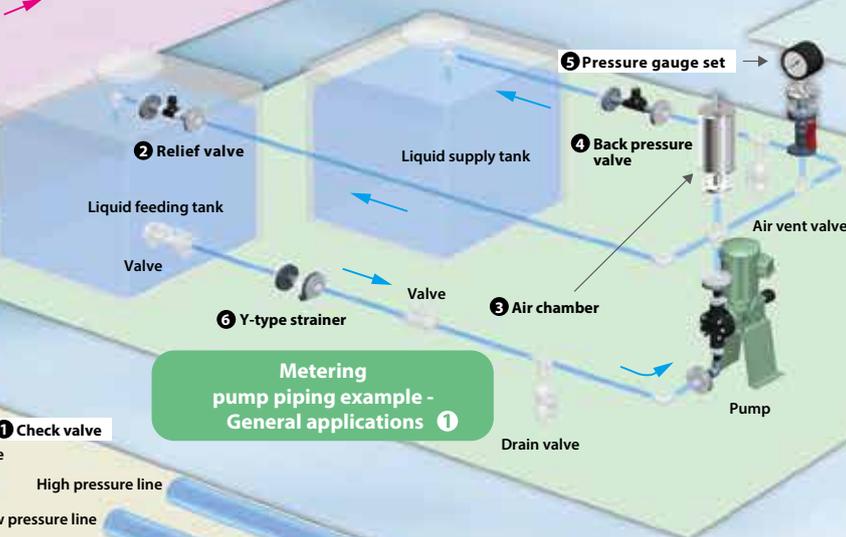


# IWAKI supports all kinds of chemical dosing with its rich lineup of accessories

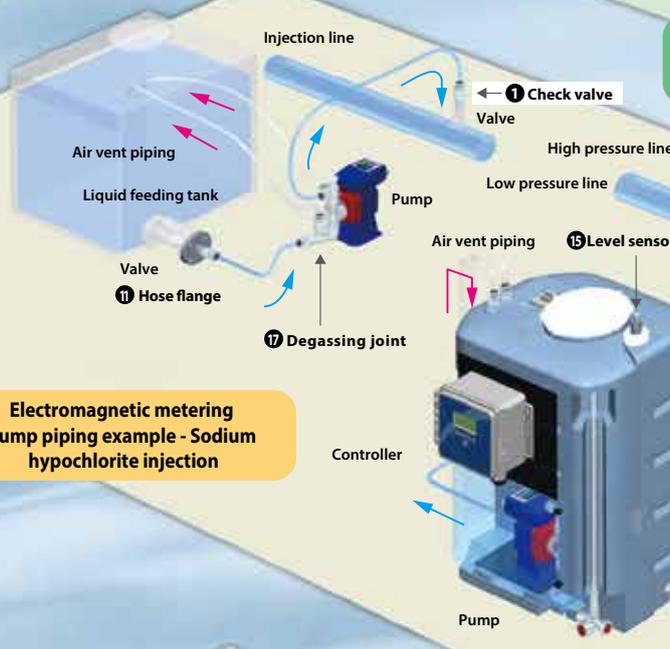
**Metering pump piping example - Sodium hypochlorite injection**



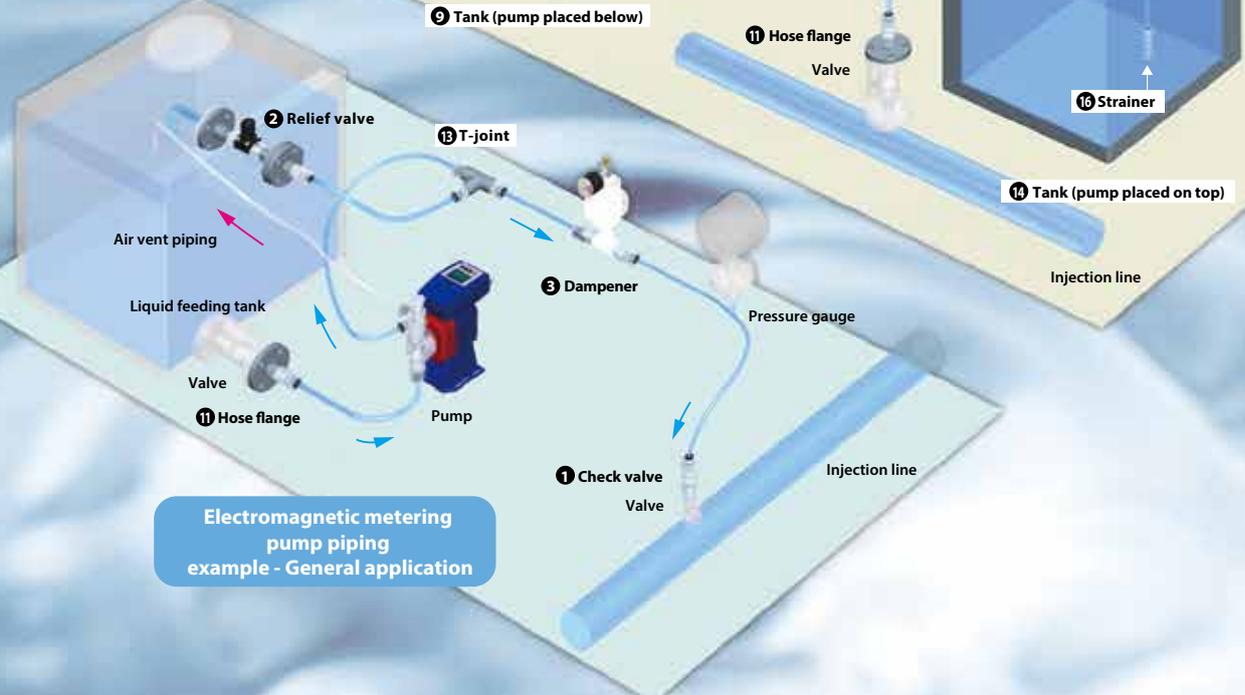
**Metering pump piping example - General applications 1**

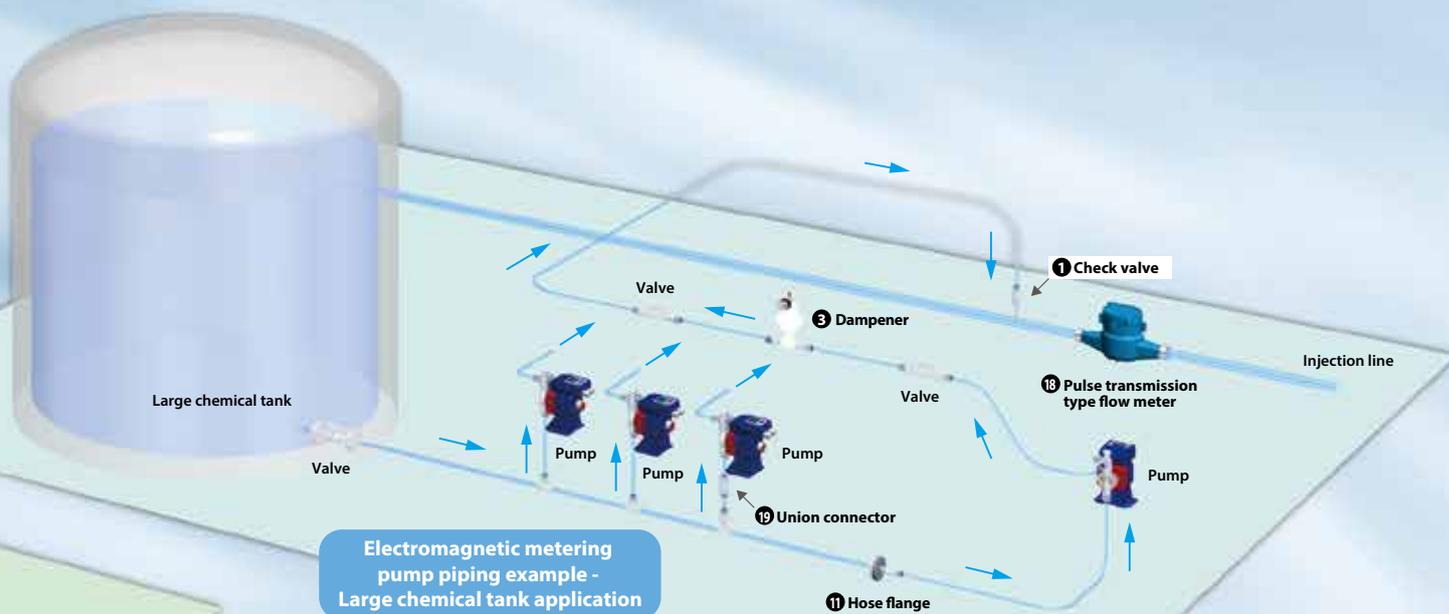


**Electromagnetic metering pump piping example - Sodium hypochlorite injection**

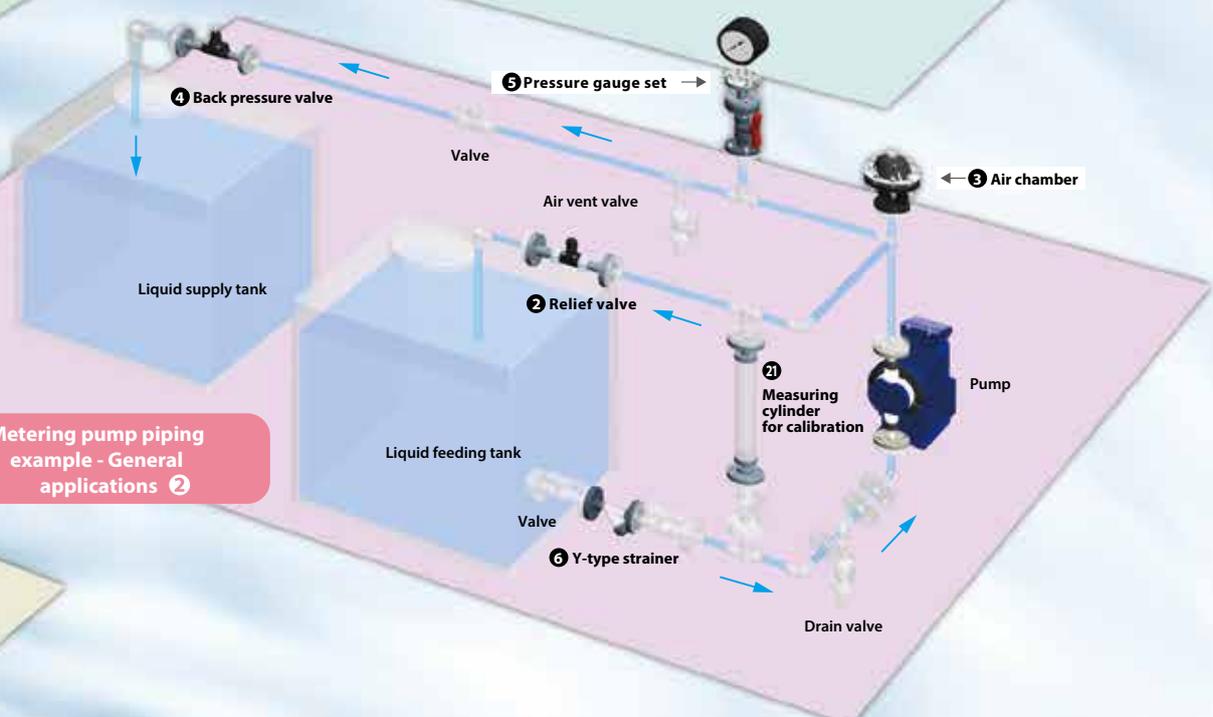


**Electromagnetic metering pump piping example - General application**





**Electromagnetic metering pump piping example - Large chemical tank application**



**Metering pump piping example - General applications ②**

Name	Installation purpose / Brief description	Page
① Check valve	Applies a constant pressure to the discharge side of the pump. Attached to the hose on the discharge side. Prevents overfeeding, backflow and siphon of the chemical.	5-6
② Relief valve	Prevents damage to the pump and piping due to an abnormal rise of the discharge pressure. When the pressure in the piping rises above the set pressure, the valve opens to release the pressure.	11-13
③ Air chamber	Suppresses discharge pulsation. Prevents piping vibration and overfeeding by suppressing the pulsation unique to a reciprocating pump.	15-16
④ Dampener	Suppresses discharge pulsation. Installed on the discharge side, pulsation is suppressed and piping vibration is prevented.	14
④ Back pressure valve	Applies a constant pressure to the discharge side of the pump. To be installed when the pressure difference between the discharge side and the suction side (differential pressure) is small.	9-10, 13
⑤ Pressure gauge set	A convenient unit that combines a pressure gauge and a stop valve. Required for checking the discharge pressure or controlling air supply to the air chamber. PVC type and SUS type pressure gauges are available.	19
⑥ Y-type strainer	Installed to the suction piping to prevent dirt and foreign matter from entering the pump chamber. PVC type and SUS type pressure gauges are available.	26
⑦ Check valve (in-line)	In-line type check valve that is installed in the middle of the hose. Secures the check pressure and extends the hose.	5-6
⑧ Check valve (without back pressure)	Attached at the injection point of the piping on the discharge side to prevent backflow of the chemical solution.	7
⑨ Tank (pump placed below)	Made of polyethylene and designed to have a pump below. Gas lock doesn't occur easily and can be used safely even for chemicals such as sodium hypochlorite and hydrazine which generate decomposition gas.	29
⑩ Drain valve set	A set of drain and an opening/closing valve for drainage. Please contact us for details.	29
⑪ Hose flange	Adapter to connect the pump hose and the flange piping. A check valve is optional.	21
⑫ Flow counter	The pressure sensor during the discharge operation of the electromagnetic metering pump detects the pulsation of fluid, to accurately grasp the discharge of the pump. Gas lock and hose disconnection can be also detected.	17
⑬ T-joint	Used to branch off hose piping.	21-22
⑭ Tank	A wide variety is available, including round tanks, general-purpose tanks and those with a pump placed below.	29-32
⑮ Level sensor	Attached directly to the tank. Checks the level of the chemical solution in the tank and outputs a signal when the level is low.	32
⑯ Strainer	Attached at the end of the suction hose. Prevents the entry of dirt and foreign matter into the pump chamber.	24
⑰ Degassing joint	Attached to the suction side of the pump to prevent gas sucking when transferring a liquid like sodium hypochlorite which easily generates gas.	20
⑱ Pulse transmission type flow meter	Measures main piping flow rate for proportional control of the pump. Outputs a pulse in proportion to the flow rate of treated water.	17
⑲ Union connector	Connects hoses of different diameter. Used when the existing hose piping has a different diameter from the pump connection. (Can be also used to extend a hose in case of the same diameter.)	23
⑳ Flow checker	Checks the discharge. FCM type outputs liquid feeding status as a pulse. FC type checks the status by detecting the move of the float inside the piping.	18
㉑ Measuring cylinder for calibration	Used to calibrate the discharge amount of the pump. Installed on the suction side to measure the suction amount.	19

# We provide an optimal solution to meet all your needs for dosing chemicals



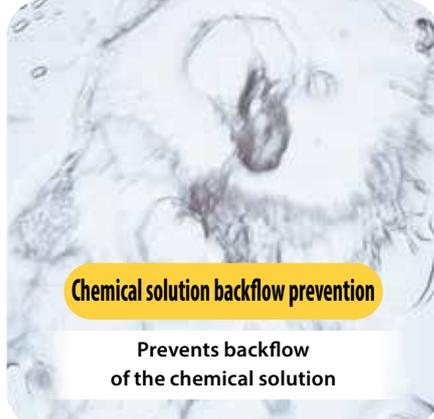
**Overfeeding Prevention**

Prevents pulsation from causing too much liquid to flow



**Siphon Prevention**

Prevents the liquid from being sucked out and flowing continuously even if the pump stops



**Chemical solution backflow prevention**

Prevents backflow of the chemical solution



**Overpressure prevention**

Prevents damage to pump and piping due to an abnormal rise of the discharge pressure



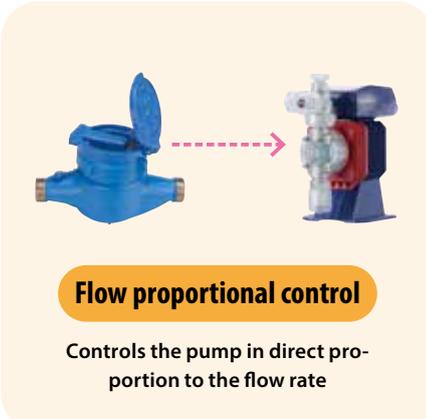
**Pulsation damping**

Reduces pulsation



**Piping vibration damping**

Reduces piping vibration



**Flow proportional control**

Controls the pump in direct proportion to the flow rate



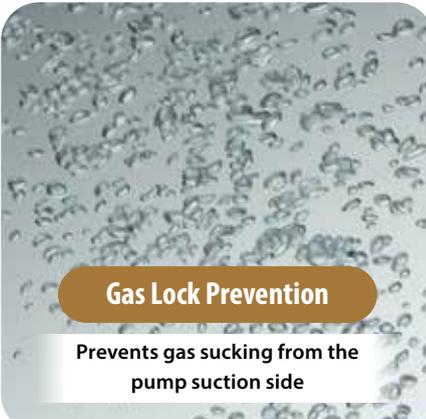
**Discharge check**

Checks the liquid feeding status of the pump



**Pressure check**

Checks the discharge pressure



**Gas Lock Prevention**

Prevents gas sucking from the pump suction side



**Piping connection**

Useful items for piping connections



**Contamination prevention**

Prevents contamination by foreign matter in the pump chamber

\* Besides the above items, many other accessories such as a pump protecting cover and a special base to elevate the pump for piping works are also available. See the page on the right or the main text for details, and consult with us if you have any questions.

# List of accessories

Name	Purpose of use	Page
Check valve	<ul style="list-style-type: none"> <li>Overfeeding prevention</li> <li>Siphon prevention</li> <li>Chemical solution backflow prevention</li> </ul>	5-6
Check valve (without back pressure)	<ul style="list-style-type: none"> <li>Chemical solution backflow prevention</li> </ul>	7
Back pressure valve with check valve	<ul style="list-style-type: none"> <li>Overfeeding prevention</li> <li>Siphon prevention</li> <li>Chemical solution backflow prevention</li> </ul>	7-8
Back pressure valve	<ul style="list-style-type: none"> <li>Overfeeding prevention</li> <li>Siphon prevention</li> </ul>	9-10 13
Relief valve	<ul style="list-style-type: none"> <li>Overpressure prevention</li> </ul>	11-13
Dampener	<ul style="list-style-type: none"> <li>Pulsation damping</li> <li>Piping vibration damping</li> </ul>	14
Air chamber	<ul style="list-style-type: none"> <li>Overfeeding prevention</li> <li>Pulsation damping</li> <li>Piping vibration damping</li> </ul>	15-16
Pulse transmission type Flow meter	<ul style="list-style-type: none"> <li>Flow proportional control</li> </ul>	17
Flow counter	<ul style="list-style-type: none"> <li>Discharge check</li> </ul>	17
Flow checker	<ul style="list-style-type: none"> <li>Discharge check</li> </ul>	18
Measuring cylinder for calibration	<ul style="list-style-type: none"> <li>Discharge check</li> </ul>	19
Pressure gauge set	<ul style="list-style-type: none"> <li>Pressure check</li> </ul>	19
Air vent valve unit	<ul style="list-style-type: none"> <li>Gas lock prevention</li> </ul>	20
Degassing joint	<ul style="list-style-type: none"> <li>Gas lock prevention</li> </ul>	20

Name	Purpose of use	Page
Hose flange	<ul style="list-style-type: none"> <li>Piping connection</li> </ul>	21-22
T-joint	<ul style="list-style-type: none"> <li>Piping connection</li> </ul>	22
Union connector/Hose coupler	<ul style="list-style-type: none"> <li>Piping connection</li> </ul>	23-24
Strainer	<ul style="list-style-type: none"> <li>Contamination prevention</li> </ul>	24
Strainer with a foot valve	<ul style="list-style-type: none"> <li>Contamination prevention</li> </ul>	25
Foot valve with a strainer	<ul style="list-style-type: none"> <li>Contamination prevention</li> </ul>	26
Y-type strainer	<ul style="list-style-type: none"> <li>Contamination prevention</li> </ul>	26
Pump protecting cover	<ul style="list-style-type: none"> <li>Pump protection</li> </ul>	27
EHN mount	<ul style="list-style-type: none"> <li>Pump mount</li> </ul>	28
Hose	<ul style="list-style-type: none"> <li>Piping</li> </ul>	28
Tank	<ul style="list-style-type: none"> <li>Tank for chemical injection</li> </ul>	29-32
Tank level sensor	<ul style="list-style-type: none"> <li>Chemical solution level check</li> </ul>	32
Other options Controllers		33
About connection diameter of multi-joint Multi-joint connection set Electromagnetic Metering Pumps / Metering Pumps		34

Overfeeding Prevention

Siphon Prevention

Chemical Solution Backflow Prevention

Overpressure Prevention

Pulsation Damping

Piping Vibration Damping

Flow Proportional Control

Discharge Check

Pressure Check

Gas Lock Prevention

Piping Connection

Contamination Prevention

Others

# Check valve

Attached to the hose on the discharge side. It prevents overfeeding and backflow of the chemical solution and also prevents siphon.

### Purpose of use

- Overfeeding prevention
- Siphon prevention
- Chemical solution backflow prevention

### Applicable pump models

- EHN
- EWN
- EH-E
- IX-B



#### CAN type

Standard type

#### CBN type

Inline type to be installed in the middle of the hose

#### CS type

Stainless steel type for high temperature  
For general use/for boiler

#### TCAN type

Tube type with its discharge outlet is a tube. As there is no stagnant area, clogging due to crystallization of the chemical can be prevented.

## Model identification

**CA - 1 VC LL - 4**  
① ② ③ ④ ⑤

- ① Series symbol  
**CA**..... Fixed hose diameter type  
**CAN**..... Multi-hose connection
- ② Size symbol  
**1**..... For small flow rate  
**2**..... For medium flow rate  
**3**..... For large flow rate
- ③ Material symbol  
**VC**..... PVC • FKM  
**VE**..... PVC • EPDM  
**V**..... GFRPP • CFRPP • FKM  
**E**..... GFRPP • CFRPP • EPDM
- ④ Set pressure symbol  
**None**..... Standard  
**LL**..... Low • Low pressure  
**L**..... Low pressure  
**H**..... High pressure
- ⑤ Hose connection symbol  
**4**..... Ø4×Ø9 (CA-1/2)  
                  Ø8×Ø13 (CA-3)  
**4×6**..... Ø4×Ø6 (CA-1/2)  
**11**..... Ø10×Ø16 (CA-3)  
**M**..... Multi-hose connection (CAN)  
**1**..... Ø4×Ø9 (CAN)  
**2**..... Ø4×Ø6 (CAN)

**CBN - 1 VC H - M**  
① ② ③ ④ ⑤

- ① Series symbol  
**CBN**..... Hose connection type
- ② Size symbol  
**1**..... For small flow rate  
**2**..... For medium flow rate
- ③ Material symbol  
**VC**..... PVC • FKM  
**VE**..... PVC • EPDM  
**V**..... GFRPP • CFRPP • FKM  
**E**..... GFRPP • CFRPP • EPDM
- ④ Set pressure symbol  
**None**..... Standard  
**L**..... Low pressure  
**H**..... High pressure
- ⑤ Hose connection symbol  
**M**..... Multi-hose connection

**CS - 1 S □ - □**  
① ② ③ ④ ⑤

- ① Series symbol  
**CS**..... Stainless steel
- ② Size symbol  
**1**..... For small-medium flow rate  
**2**..... For large flow rate
- ③ Type symbol  
**S**..... For general use  
**E**..... For boiler
- ④ Set pressure symbol  
**None**..... Standard  
**L**..... Low pressure
- ⑤ OUT thread connection symbol  
**None**..... Standard  
**2**..... R1/2 (for boiler)

**TCAN-1 VC □ - M**  
① ② ③ ④

- ① Series symbol  
**TCAN-1**..... Tube type
- ② Material symbol  
**VC**..... PVC • FKM
- ③ Length symbol  
**None**..... Standard  
**S**..... Short type
- ④ Hose connection symbol  
**M**..... Ø4×Ø9/Ø4×Ø6

## Specifications

Model	Connection		Set pressure		Material			Applicable pump	Wet-end material symbol	
	IN	OUT	MPa		Body	Spring	O-ring			
<b>CA-1VCLL-4</b>	Hose connection Ø4×Ø9	Thread connection R3/8 R1/2	0.03	+0.02 -0.005	PVC	Hastelloy C276	FKM	EHN-B09	VC	
<b>CA-1VCLL-4x6</b>	Hose connection Ø4×Ø6									
<b>CAN-1VC-M</b>	Hose connection Ø4×Ø9 <sup>Note 2</sup> Ø4×Ø6	Thread connection R3/8 R1/2	0.17	±0.04	PVC	Hastelloy C276	FKM	EHN/EWN-B11 • 16 • 21, C16 • 21	VC	
<b>CAN-1VE-M</b>								IX-B007 • 015	TC	
<b>CAN-1VCL-M</b>								EHN/EWN-B11 • 16 • 21, C16 • 21	VH	
<b>CAN-1VEL-M</b>								IX-B007 • 015	TE	
<b>CAN-1VCH-M</b>			0.05	0.03	±0.04	GFRPP CFRPP	Hastelloy C276	FKM	EHN/EWN-B11 • 16 • 21, C16 • 21	VC
<b>CAN-1VEH-M</b>										VE
<b>CAN-1V-M</b>										VC
<b>CAN-1E-M</b>										VH
<b>CAN-1VH-M</b>										PC
<b>CAN-1EH-M</b>										PH
<b>CAN-2VC-M</b>	Hose connection Ø8×Ø13 <sup>Note 2</sup> Ø9×Ø12	Thread connection R3/8 R1/2	0.17	±0.04	PVC	Hastelloy C276	FKM	EHN/EWN-C31 EH-E31 • 36	VC	
								IX-B030 • 045	TC	

Model	Connection		Set pressure		Material			Applicable pump	Wet-end material symbol							
	IN	OUT	MPa		Body	Spring	O-ring									
<b>CAN-2VE-M</b>	Hose connection Ø8×Ø13 <sup>Note 2</sup> Ø9×Ø12	Thread connection R3/8 R1/2	0.17	±0.04	PVC	Hastelloy C276	EPDM	EHN/EWN-C31 EH-E31·36	VH, V6							
<b>CAN-2VCL-M</b>								IX-B030·045	TE							
<b>CAN-2VEL-M</b>			EHN/EWN-B31, C36	VC												
<b>CAN-2V-M</b>				VH												
<b>CAN-2E-M</b>			EHN-C31 EH-E31·36	PC												
<b>CAN-2VL-M</b>				PH												
<b>CAN-2EL-M</b>	EHN-B31, C36	PH														
<b>CA-3VCH-4</b>	Hose connection Ø8×Ø13	Thread connection R1/2	0.17	±0.04	PVC	Hastelloy C276	FKM	EH-E46	VC							
<b>CA-3VEH-4</b>									EPDM	V6						
<b>CA-3VH-4</b>			GFRPP	PC												
<b>CA-3VC-11</b>			FKM	VC												
<b>CA-3VE-11</b>				EPDM	V6											
<b>CA-3V-11</b>			FKM	PC												
<b>CA-3VCL-11</b>	VC·VM															
<b>CA-3VEL-11</b>	0.05	±0.02	PVC	GFRPP	Hastelloy C276	EPDM	EH-E55, 56	V6								
<b>CA-3VL-11</b>								PC								
<b>CBN-1VC-M</b>	Hose connection Ø4×Ø9 <sup>Note 2</sup> Ø4×Ø6	Hose connection Ø4×Ø9 Ø4×Ø6	0.17	±0.04				PVC	Hastelloy C276	FKM	EHN/EWN-B11·16·21, C16·21	VC				
<b>CBN-1VE-M</b>												EPDM	VH			
<b>CBN-1VCH-M</b>			0.34	±0.04								GFRPP	Hastelloy C276	FKM	EHN-B11·16·21, C16·21	VC
<b>CBN-1VEH-M</b>																EPDM
<b>CBN-1V-M</b>			0.17	+0.05 -0.04	GFRPP	Hastelloy C276	FKM					EHN-B11·16·21, C16·21				PC
<b>CBN-1E-M</b>																EPDM
<b>CBN-1VH-M</b>	0.34	+0.05 -0.04	GFRPP	Hastelloy C276	FKM			EHN-B11·16·21, C16·21	PC							
<b>CBN-1EH-M</b>									EPDM	PH						
<b>CBN-2VC-M</b>	Hose connection Ø8×Ø13 <sup>Note 2</sup> Ø9×Ø12	Hose connection Ø8×Ø13 Ø9×Ø12	0.17						±0.04	PVC	Hastelloy C276		FKM	EHN/EWN-C31	VC	
<b>CBN-2VE-M</b>															EPDM	VH
<b>CBN-2VCL-M</b>			0.05			+0.04 -0.03	GFRPP		Hastelloy C276			FKM			EHN/EWN-B31, C36	VC
<b>CBN-2VEL-M</b>																EPDM
<b>CBN-2V-M</b>			0.17	±0.04	GFRPP	Hastelloy C276	FKM	EHN-C31								PC
<b>CBN-2E-M</b>																EPDM
<b>CBN-2VL-M</b>	0.05	+0.04 -0.03	GFRPP	Hastelloy C276	FKM					EHN-B31, C36	PC					
<b>CBN-2EL-M</b>											EPDM		PH			
<b>CS-1S</b>	Thread connection Rc1/4	Thread connection Rc1/4	0.2						±0.04		SUS316	Hastelloy C276	PTFE <sup>Note 1</sup>	EHN-B11·21, C21·31 EH-E31·36	SH	
<b>CS-1SL</b>														IX-B007·015	S6	
<b>CS-1E</b>	Hose connection Ø4×Ø6	Thread connection R3/8	0.12			±0.04	SUS304	Hastelloy C276	EPDM		EHN-B11, C16-H		VH·PH			
<b>CS-1E-2</b>		Thread connection R1/2														
<b>CS-2S</b>	Thread connection Rc3/8	Thread connection Rc3/8	0.2	±0.03	SUS316	Hastelloy C276	PTFE <sup>Note 1</sup>		EH-E46	SH						
<b>CS-2SL</b>									IX-B030·045	S6						
<b>TCAN-1VC-M</b>	Hose connection Ø4×Ø9 <sup>Note 2</sup> Ø4×Ø6	Thread connection R3/8 R1/2	0.2	±0.04	PVC		Hastelloy C276		FKM	EHN-B11·16·21, C16·21	VC					
<b>TCAN-1VCS-M</b>																

Note 1: The sealing of CS type is a gasket.

Note 2: Applicable hose diameter can be changed. Refer to "Connection Diameter of the Multi-connection" on page 34 for details.

**Dimensions (mm)**

· CAN type

· CBN type

· CS-1/2S(L)

· CS-1E(-2)

Model	W	L	a	b	c	d	e	f	g
<b>CAN-1V □-M</b>	32	(137)	27	30	40	—	R1/2	R3/8	—
<b>CAN-2V □-M</b>	38	(146)	27	36	40	—	R1/2	R3/8	—
<b>CA-3V □-M</b>	40	(116)	30	40	24	—	R1/2	Ø12	—
<b>CBN-1 □</b>	32	(99)	27	30	—	—	—	—	—
<b>CBN-2 □</b>	38	(105)	27	36	—	—	—	—	—
<b>CS-1S</b>	32	(745)	—	—	—	—	—	—	—
<b>CS-2S</b>	21	(57)	—	—	—	—	—	—	—
<b>TCAN-1VC-M</b>	32	(140)	27	30	(43)	(55)	R1/2	R3/8	Ø13
<b>TCAN-1VCS-M</b>	32	(116)	27	30	(19)	(31)	R1/2	R3/8	Ø13

· TCAN type

Overfeeding Prevention  
 Siphon Prevention  
 Chemical Solution Backflow Prevention  
 Overpressure Prevention  
 Pulsation Damping  
 Piping Vibration Damping  
 Flow Proportional Control  
 Discharge Check  
 Pressure Check  
 Gas Lock Prevention  
 Piping Connection  
 Contamination Prevention  
 Others

# Check valve (without back pressure)

Attached at the injection point of the piping on the discharge side to prevent backflow of the chemical solution.



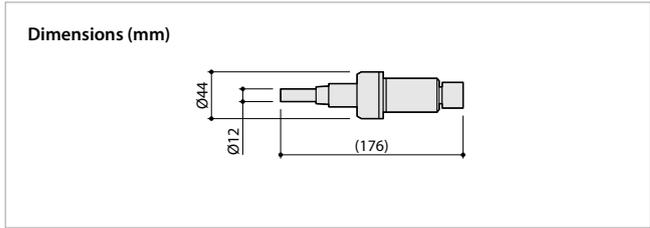
## Model identification

**CV - 1 VC - 1**  
①                    ②                    ③                    ④

- ① Series symbol  
**CV**.....Check valve (without back pressure)  
**VC**.....PVC • FKM  
**VE**.....PVC • EPDM
- ② Size symbol  
**1**.....For small flow rate  
**2**.....For medium flow rate
- ③ Material symbol  
**VC**.....PVC • FKM  
**VE**.....PVC • EPDM
- ④ Hose connection symbol  
**1**.....Ø4×Ø9  
**2**.....Ø4×Ø6  
**4**.....Ø8×Ø13

Purpose of use  
**Chemical solution backflow prevention**

Applicable pump models  
**EHN**  
**EWN**



## Specifications

Model	Connection		Material		Applicable pump	Wet-end material symbol
	IN	OUT	Body	O-ring		
<b>CV-1VC-1</b>	Hose connection Ø4×Ø9	Thread connection R3/8 R1/2	PVC	FKM	EHN/EWN-B11 • 16 • 21, C16 • 21	VC
<b>CV-1VE-1</b>				EPDM		VH
<b>CV-1VC-2</b>	Hose connection Ø4×Ø6			FKM		VC
<b>CV-1VE-2</b>				EPDM		VH
<b>CV-2VC-4</b>	Hose connection Ø8×Ø13			FKM	EHN/EWN-B31, C31 • 36	VC
<b>CV-2VE-4</b>				EPDM		VH

# Back pressure valve with check valve

This is installed when the pressure difference between the discharge side and the suction side (differential pressure) is small. It improves injection accuracy and prevents backflow. The release pressure is adjustable.



## Model identification

**BVC-1 TV - 4H**  
①                    ②                    ③

- ① Series symbol  
**BVC-1**.....Back pressure valve with check valve
- ② Material symbol  
**PV**.....PVC • FKM  
**PE**.....PVC • EPDM  
**TV**.....PVDF • FKM  
**V**.....GFRPP • FKM
- ③ Hose connection symbol  
**4P**.....Ø4×Ø6 (PE)  
**4H**.....Ø4×Ø9 (PV/PE), Ø4×Ø6 (TV)  
**6P**.....Ø6×Ø8  
**8H**.....Ø8×Ø13.5, Ø8×Ø14  
**8H (8x13)**.....Ø8×Ø13  
**9P**.....Ø9×Ø12  
**10H**.....Ø10×Ø12  
**10**.....Ø10×Ø16  
**12H**.....Ø12×Ø18  
**12P**.....Ø12×Ø16 (PE)  
**13E**.....Ø13×Ø20 (PVC)

Purpose of use  
**Overfeeding prevention**  
**Siphon prevention**  
**Chemical solution backflow prevention**

Applicable pump models  
**EHN**      **LK**  
**EWN**      **SK**  
**EH-E**

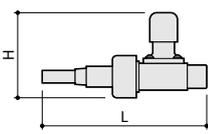
■ Specifications

Model	Connection		Set pressure MPa	Material			Applicable pump	Wet-end material symbol
	IN	OUT		Body	Valve	O-ring		
<b>BVC-1TV-4H</b>	Hose connection Ø4×Ø6	Thread connection R3/8 R1/2	0.2 ±0.02	PVDF	FKM	PTFE	EHN-B11 • 21, C21	FC
<b>BVC-1TV-10H</b>	Hose connection Ø10×Ø12		0.05 +0.02 -0.01				EHN-C36, EH-E56	
			0.1 ±0.02				EHN-C36, EH-E46 • 56	
			0.2 ±0.02				EHN-C31, EH-E31 • 36	
<b>BVC-1PVL-4H</b>	Hose connection Ø4×Ø9	Thread connection R3/8 R1/2	0.15 ±0.01 <sup>Note 1</sup> (0.05 to 0.2) <sup>Note 2</sup>	PVC	FKM	FKM	EHN/EWN-B11 • 16 • 21, C16 • 21	VC
<b>BVC-1PEL-4H</b>			EPDM		EPDM	LK-11, 21, 22	VH	
<b>BVC-1PV-4H</b>	Hose connection Ø4×Ø9	Thread connection R3/8 R1/2	0.3 ±0.01	PVC	FKM	FKM	LK-11 • 21 • 22	VC
<b>BVC-1PE-4H</b>					EPDM	EPDM	SK-11 • 21 • 22	VH
<b>BVC-1PVL-4P</b>	Hose connection Ø4×Ø6	Thread connection R3/8 R1/2	0.15 ±0.01	PVC	FKM	FKM	SK-1, 2	VC
<b>BVC-1PEL-4P</b>					EPDM	EPDM		VH
<b>BVC-1PVL-6P</b>	Hose connection Ø6×Ø8	Thread connection R3/8 R1/2	0.15 ±0.01 <sup>Note 1</sup> (0.05 to 0.2) <sup>Note 2</sup>	PVC	FKM	FKM	EHN/EWN-B11 • 16 • 21, C16 • 21	VC
<b>BVC-1PEL-6P</b>					EPDM	EPDM		VH
<b>BVC-1PVL-8H (8×13)</b>	Hose connection Ø8×Ø13	Thread connection R3/8 R1/2	0.15 ±0.01	PVC	FKM	FKM	EHN/EWN-C31	VC
<b>BVC-1PEL-8H (8×13)</b>					EPDM	EPDM	EH-E31 • 36 • 46,	VH
<b>BVC-1PVL-8H</b>	Hose connection Ø8×Ø13.5 Ø8×Ø14	Thread connection R3/8 R1/2	0.15 ±0.01	PVC	FKM	FKM	SK-31, 32	VC
<b>BVC-1PEL-8H</b>					EPDM	EPDM		VH
<b>BVC-1PVL-9P</b>	Hose connection Ø9×Ø12	Thread connection R3/8 R1/2	0.15 ±0.01 <sup>Note 1</sup> (0.05 to 0.2) <sup>Note 2</sup>	PVC	FKM	FKM	EHN/EWN-B11 • 16 • 21, C16 • 21	VC
<b>BVC-1PEL-9P</b>					EPDM	EPDM	SK-31, 32	VH
<b>BVC-1PVL-10</b>	Hose connection Ø10×Ø16	Thread connection R3/8 R1/2	0.2 ±0.02	PVC	FKM	FKM	EH-E56	VC
<b>BVC-1PEL-10</b>			0.1 ±0.03		EPDM	EPDM	EH-E56	VH
			0.2 ±0.02					
<b>BVC-1VL-10</b>	Hose connection Ø10×Ø16	Thread connection R3/8 R1/2	0.1 ±0.03	GFRPP	FKM	PTFE	EH-E56	PC
			0.2 ±0.02					
<b>BVC-1PVL-12H</b>	Hose connection Ø12×Ø18	Thread connection R3/8 R1/2	0.05 to 0.2	PVC	FKM	FKM	LK-31 • 32 • 45, SK-41, 42	VC
<b>BVC-1PEL-12H</b>					EPDM	EPDM		VH
<b>BVC-1PV-12H</b>	Hose connection Ø12×Ø18	Thread connection R3/8 R1/2	0.2 to 0.8	PVC	FKM	FKM	LK-21 • 32 • 45, SK-41, 42	VC
<b>BVC-1PE-12H</b>					EPDM	EPDM		VH
<b>BVC-1PVL-12P</b>	Hose connection Ø12×Ø16	Thread connection R3/8 R1/2	0.15 ±0.01 <sup>Note 1</sup> (0.05 to 0.2) <sup>Note 2</sup>	PVC	FKM	FKM	SK-4	VC
<b>BVC-1PEL-12P</b>					EPDM	EPDM		VH

Note 1: Standard set pressure  
Note 2: Adjustable pressure

**Dimensions (mm)**

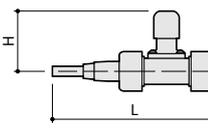
•BVC-1TV-4H  
•BVC-1TV-10H



Model	L	H
<b>BVC-1TV-4H</b>	(172)	(88)
<b>BVC-1TV-10H</b>	(174)	(88)

•Except the above



Model	L	H
<b>BVC-1P □L-4H</b>	(185)	(67)
<b>BVC-1P □L-4P</b>	(185)	(67)
<b>BVC-1P □L-8H</b>	(185)	(67)
<b>BVC-1P □L-8H (8×13)</b>	(189)	(67)
<b>BVC-1P □L-4H</b>	(185)	(67)
<b>BVC-1P □L-10</b>	(189)	(67)
<b>BVC-1VL-10</b>	(189)	(67)
<b>BVC-1P □L-12H</b>	(185)	(67)
<b>BVC-1P □L-12H</b>	(185)	(67)
<b>BVC-1P □L-12P</b>	(185)	(67)
<b>BVC-1P □L-13E</b>	(185)	(67)

- Overfeeding Prevention
- Siphon Prevention
- Chemical Solution Backflow Prevention
- Overpressure Prevention
- Pulsation Damping
- Piping Vibration Damping
- Flow Proportional Control
- Discharge Check
- Pressure Check
- Gas Lock Prevention
- Piping Connection
- Contamination Prevention
- Others

# Back pressure valve

This is installed when the pressure difference between the discharge side and suction side (differential pressure) is small.

Purpose of use

- Overfeeding prevention
- Siphon prevention

Applicable pump models

- EHN
- EWN
- EH-E
- LK
- TD
- SK
- AX
- IX-B/C/D



PVDF type

PVC type

## Model identification

BV - 2 S6 B - 15				N 50 BV - 5 S6 - F					
①	②	③	④	①	②	③	④	⑤	
① Series symbol BV.....back pressure valve	② Capacity symbol 1.....1.0 l/min 2.....2.0 l/min 3.....3.0 l/min 7.....7.5 l/min 25.....25 l/min	③ Material symbol (main material/O-ring) BV-1 PV.....PVC/FKM BV-3 PE.....PVC/EPDM NE.....PVC/PTFE/None PV.....PVC/EPDM NV.....PVC/PTFE/FKM PE.....PVC/PTFE/EPDM BV-2 • 7 • 25 S6.....SCS14 (or SUS316) • PTFE/None V.....PVC • PTFE/None F.....PVDF • PTFE/None TV.....PVDF • PTFE/FKM TE.....PVDF • PTFE/EPDM	④ Set pressure symbol None.....0.8 MPa or less (1.0 MPa for BV-3P type only, 0.3 MPa or less for BV-3N type) B.....0.8 MPa or more L.....0.05 - Less than 0.2 MPa (BV-1P type only)	⑤ Connection diameter symbol Hose connection type 4H.....Ø4×Ø9 hose (PVC) 8H.....Ø8×Ø13.5 hose (PVC) Ø8×Ø14 hose (PVC) 12H.....Ø12×Ø18 hose (PVC) 4P.....Ø4×Ø6 hose (PE) 9P.....Ø9×Ø12 hose (PE) 12P.....Ø12×Ø16 hose (PE) Flange connection type 15.....15A flange 20.....20A flange 25.....25A flange 40.....40A flange 50.....50A flange Thread connection type C17.....Rc1/2 C18.....Rc3/4	① Type symbol N.....N □ BV type	② Connection diameter symbol 50.....50 A 65.....65 A	③ Maximum set pressure symbol 5.....0.5 MPa	④ Material symbol S6.....SUS316 • PTFE V.....PVC • CR V2.....PVC • FKM	⑤ Connection symbol F.....Flange connection

## Specifications

Model	Connection	Flow rate range L/min (L/H)	Set pressure MPa	Material			Applicable pump <sup>Note 2</sup>	Wet-end material symbol	Mass kg
				Body	Diaphragm	Rubber			
BV-1PV(L)-15	Flange connection JIS10K15A	0.005 to 1.0 (0.3 to 60)	0.2 to 0.8 (0.05 to 0.2)	PVC	FKM	FKM	EHN/EWN-B11 to 31, C16 to 36 EH-E36 to 46 LK-11 to 45 SK-11 to 42 AXJ-L07 to 30	VC	0.5
BV-1PE(L)-15					EPDM	EPDM		VH	
BV-1TV(L)-15	Flange connection JIS10K15A	0.005 to 1.0 (0.3 to 60)	0.2 to 0.8 (0.05 to 0.2)	PVDF	FKM	FKM	EHN-B11 to 31, C16 to 36 EH-E31 to 56 LK-11 to 45	FC	0.5
BV-1PV(L)-20	Flange connection JIS10K20A	0.005 to 1.0 (0.3 to 60)	0.2 to 0.8 (0.05 to 0.2)	PVC	FKM	FKM	AXJ-L07 to 30	VC	0.7
BV-1PE(L)-20					EPDM	EPDM		VH	
BV-1PVL-4H	Hose connection Ø4×Ø9	0.005 to 1.0 (0.3 to 60)	0.05 to 0.2	PVC	FKM	FKM	LK-11 to 22 SK-11 to 22	VC	0.2
BV-1PEL-4H					EPDM	EPDM		VH	
BV-1PV-4H			0.2 to 0.8		FKM	FKM	EHN/EWN-B11 to 31, C16 to 36 EH-E36 to 46 LK-11 to 22 SK-11 to 22	VC	
BV-1PE-4H					EPDM	EPDM		VH	
BV-1PV-4P	PE tube Ø4×Ø6	0.005 to 1.0 (0.3 to 60)	0.2 to 0.8	PVC	FKM	FKM	EHN/EWN-B11 to 31, C16 to 36 EH-E36 to 46 SK-11 to 22	VC	0.2
BV-1PE-4P					EPDM	EPDM		VH	
BV-1PV(L)-8H	Hose connection Ø8×Ø13.5 <sup>Note 1</sup> Ø8×Ø14 <sup>Note 1</sup>	0.005 to 1.0 (0.3 to 60)	0.2 to 0.8 (0.05 to 0.2)	PVC	FKM	FKM	SK-31 • 32	VC	0.2
BV-1PE(L)-8H					EPDM	EPDM		VH	
BV-1PV(L)-9P	PE tube Ø9×Ø12	0.005 to 1.0 (0.3 to 60)	0.2 to 0.8 (0.05 to 0.2)	PVC	FKM	FKM	EHN/EWN-B31, C31 • 36 EH-E36 to 46 SK-31 • 32	VC	0.2
BV-1PE(L)-9P					EPDM	EPDM		VH	
BV-1PVL-12H	Hose connection Ø12×Ø18	0.005 to 1.0 (0.3 to 60)	0.05 to 0.2	PVC	FKM	FKM	LK-31 to 45 SK-41 • 42	VC	0.2
BV-1PEL-12H					EPDM	EPDM		VH	

Model	Connection	Flow rate range L/min (L/H)	Set pressure MPa	Material			Applicable pump <sup>Note 2</sup>	Wet-end material symbol	Mass kg			
				Body	Diaphragm	Rubber						
<b>BV-3T□-15</b>	JIS10K 15A DIN PN10 DN15 ANSI 150LB 1/2" <sup>Note4</sup>	3.0(180)	0.1 to 0.8 <sup>Note3</sup> standard : 0.15	PVDF	PTFE	FKM EPDM	IX-B IX-C060 IX-D150	TC・TE	0.7			
<b>BV-3T□-20</b>	JIS10K 20A								0.8			
<b>BV-3T□-MS</b>	Hose connection Ø4×Ø6, Ø4×Ø9								0.5			
<b>BV-3T□-ML</b>	Hose connection Ø8×Ø13, Ø9×Ø12											
<b>BV-3T□-R</b>	R1/2											
<b>BV-3T□-N</b>	1/2NPT											
<b>BV-3T□-G</b>	G3/4											
<b>BV-1PV-12H</b>	Hose connection Ø12×Ø18	0.005 to 1.0 (0.3 to 60)	0.2 to 0.8	PVC	FKM EPDM	FKM EPDM	LK-31 to 45 SK-41・42	VC VH	0.2			
<b>BV-1PE-12H</b>	PE tube Ø12×Ø16	0.005 to 1.0 (0.3 to 60)	0.05 to 0.2	PVC	FKM EPDM	FKM EPDM	SK-41・42	VC VH	0.2			
<b>BV-1PV-12P</b>												
<b>BV-1PE-12P</b>												
<b>BV-1PV-13E</b>										Hose connection Ø13×Ø20		
<b>BV-1PE-13E</b>												
<b>BV-3P-15</b>	Flange connection JIS10K15A	0.03 to 3.0 (1.8 to 180)	0.1 to 0.8	PVC	PTFE	—	LK-47, TD-01 to 2 AXJ-L07 to 30	VC・VH・V6	0.6			
<b>BV-3P-20</b>	Flange connection JIS10K20A						IX-C060	TC・TE				
<b>BV-3P-25</b>	Flange connection JIS10K25A						LK-55・A55 AXJH-L42 AXK-L30・42 AXA-L42	VC・VH				
							0.9					
<b>BV-3PV-12H</b>	Hose connection Ø12×Ø18	0.03 to 3.0 (1.8 to 180)	0.1 to 0.8	PVC	PTFE	FKM EPDM	SK-41・42 TD-01 to 2	VC VH・V6・V5	0.4			
<b>BV-3PE-12H</b>	PE tube Ø12×Ø16	0.03 to 3.0 (1.8 to 180)	0.1 to 0.8	PVC	PTFE	FKM EPDM	SK-41・42	VC	0.4			
<b>BV-3PV-12P</b>								VH				
<b>BV-3PE-12P</b>								VC				
<b>BV-3PV-13E</b>								VH				
<b>BV-3PE-13E</b>	Hose connection Ø13×Ø20											
<b>BV-3NV-15</b>	Flange connection JIS10K15A	0.005 to 3.0 (0.3 to 180)	0.1 to 0.3	PVC	FKM	FKM	EH-E56 LK-11 to 47	VC	0.6			
<b>BV-3NE-15</b>							IX-B・C060	TC				
<b>BV-3NV-20</b>	Flange connection JIS10K20A				FKM	FKM	EH-E56 LK-11 to 47	VH				
							IX-B・C060	TE				
<b>BV-3NE-20</b>	Flange connection JIS10K25A				FKM	FKM	EH-E56	VC				
<b>BV-3NV-25</b>							IX-C150・D150	TC				
<b>BV-3NE-25</b>		EPDM	EPDM	EH-E56			VH					
<b>BV-7TV-15</b>	Flange connection JIS10K15A	0.2 to 7.5 (12 to 450)	0.05 to 0.8	PVDF	PTFE	FKM EPDM	IX-B・C060 SK, LK-47	TC TE	5			
<b>BV-7V-20</b>	Flange connection JIS10K20A	0.2 to 7.5 (12 to 450)	0.05 to 0.8	PVC	PTFE	—	IX-C150・D150	TC・TE	3.5			
<b>BV-7V-25</b>	Flange connection JIS10K25A						LK-55・57・A55・A57 TD-6 to 8	VC・VH・V6				
<b>BV-7F-C17</b>	Thread connection Rc1/2	0.2 to 7.5 (12 to 450)	0.05 to 0.8	PVDF	PTFE	—	IX-B	TC・TE	3.5			
<b>BV-7F-C18</b>	Thread connection Rc3/4											
<b>BV-7TV-25</b>	Flange connection JIS10K25A	0.2 to 7.5 (12 to 450)	0.05 to 0.8	PVDF	PTFE	FKM EPDM	IX-D300 LK-55・57	TC TE	5			
<b>BV-25V-25</b>	Flange connection JIS10K25A	2 to 25 (120 to 1,500)	0.05 to 0.8	PVC	PTFE	—	TD-8	VC・V6・V5	4			
<b>BV-25TV-25</b>	Flange connection JIS10K25A	2 to 25 (120 to 1,500)	0.05 to 0.8	PVDF	PTFE	FKM EPDM	LK-A65・B65	TC	4			
<b>BV-25TE-25</b>								TE				
<b>BV-25V-40</b>	Flange connection JIS10K40A	2 to 25 (120 to 1,500)	0.05 to 0.8	PVC	PTFE	—	LK-A65・B65	VC・V54・V5	4			
<b>BV-25TV-40</b>	Flange connection JIS10K40A	2 to 25 (120 to 1,500)	0.05 to 0.8	PVDF	PTFE	FKM EPDM	LK-A65・B65	TC	4			
<b>BV-25TE-40</b>								TE				
<b>BV-25V-50</b>	Flange connection JIS10K50A	2 to 25 (120 to 1,500)	0.05 to 0.8	PVC	PTFE	—	LK-B75, C76	VC・V54・V5	20			
<b>N50BV-5V-F</b>		2.5 to 50 (15 to 3,000)	0.15 to 0.5					CR		CR	LK-C76, B75	VS4・VS
<b>N50BV-5V2-F</b>								FKM		FKM		VC
<b>N65・50BV-5V-F</b>		Flange connection JIS10K65A	5 to 70 (300 to 4,200)					0.15 to 0.5		CR	CR	LK-C86・87
<b>N65・50BV-5V2-F</b>	FKM			FKM	LK-C86・87	VC						

Overfeeding Prevention
Siphon Prevention
Chemical Solution Backflow Prevention
Overpressure Prevention
Pulsation Damping
Piping Vibration Damping
Flow Proportional Control
Discharge Check
Pressure Check
Gas Lock Prevention
Piping Connection
Contamination Prevention
Others

Model	Connection	Flow rate range L/min (L/H)	Set pressure MPa	Material			Applicable pump <sup>Note 2</sup>	Wet-end material symbol	Mass kg			
				Body	Diaphragm	Rubber						
<b>BV-2S6-15</b>	Flange connection JIS10-16K15A	0.02 to 2.0 (1.2 to 120)	0.05 to 0.8	SUS316 SCS14	PTFE	PTFE	LK-11 to 47 TD-01 to 1 IX-B • C060	S6	3.5			
<b>BV-2S6-C17</b>	Thread connection Rc1/2									IX-B		
<b>BV-2S6-C18</b>	Thread connection Rc3/4											
<b>BV-7S6-20</b>	Flange connection JIS10-16K20A	0.2 to 7.5 (12 to 450)	0.1 to 0.8				LK-55 • 57 • A55 • A57 IX-D300	S6	6			
<b>BV-7S6-25</b>	Flange connection JIS10-16K25A											
<b>BV-2S56-25</b>	Flange connection JIS10K25A	2 to 25 (120 to 1,500)	0.1 to 0.8				TD-6 to 8	S6	7			
<b>BV-2S56-40</b>	Flange connection JIS10K40A									LK-A65 • B65	S4	7.5
<b>BV-2S56-50</b>	Flange connection JIS10K50A											
<b>N50BV-5S6-F</b>	Flange connection JIS10K50A	2.5 to 80 (150 to 4,800)	0.15 to 0.5				LK-B75, C76	S4	29			
<b>N65BV-5S6-F</b>	Flange connection JIS10K65A	5 to 120 (300 to 7,200)								LK-C86 • 87	S4	42

Note 1: For SK Series Note 2: Hose flange is required for use with EHN, EWN, EHN, EH-E.  
 Note 3: When connecting a hose, use it at a hose normal pressure or less.  
 Note 4: The flange is a shared product that complies with the standards listed in the table.  
 \* External dimensions are the same as the relief valve. See Page 13 for details.

# Relief valve

When the pressure in the piping rises above the set pressure, the valve opens to release the pressure.



### Purpose of use

Overpressure prevention

### Applicable pump models

EHN

TD

EWN

SK

EH-E

AX

LK

IX-B/C/D

## Model identification

<b>RV</b> ①	-	<b>2</b> ②	<b>S6</b> ③	-	<b>B</b> ④	-	<b>15</b> ⑤
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① Series symbol  
**RV**.....Relief valve

② Capacity symbol  
**1**.....1.0 l/min  
**2**.....2.0 l/min  
**3**.....3.0 l/min  
**7**.....7.5 l/min  
**25**.....25 l/min

③ Material symbol (main material/O-ring)  
**PV**.....PVC/FKM  
**PE**.....PVC/EPDM  
**P**.....PVC-FKM/None  
**PV**.....PVC+PTFE/FKM  
**PE**.....PVC+PTFE/EPDM  
**S6**.....SCS14 (or SUS316) +PT-FE/None  
**V**.....PVC+PTFE/None  
**TV**.....PVDF+PTFE/FKM  
**TE**.....PVDF+PTFE/EPDM

④ Set pressure symbol  
**None**.....0.8 MPa or less  
 (1.0 MPa for RV-3P type only)  
**B**.....0.8 MPa or more

⑤ Connection diameter symbol  
 Hose connection type  
**4H**.....Ø4×Ø9 hose (PVC)  
**8H**.....Ø8×Ø13.5 hose (PVC)  
 Ø8×Ø14 hose (PVC)  
**12H**.....Ø12×Ø18 hose (PVC)  
**4P**.....Ø4×Ø6 hose (PE)  
**9P**.....Ø9×Ø12 hose (PE)  
**12P**.....Ø12×Ø16 hose (PE)  
 Flange connection type  
**15**.....15A flange  
**20**.....20A flange  
**25**.....25A flange  
**40**.....40A flange  
**50**.....50A flange

<b>N</b> ①	<b>50</b> ②	<b>RV</b> ①	-	<b>5</b> ③	<b>S4</b> ④	-	<b>F</b> ⑤
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① Type symbol  
**N**.....N □ RV type

② Connection diameter symbol  
**50**.....50 A  
**65**.....65 A

③ Maximum set pressure symbol  
**5**.....0.5 MPa

④ Material symbol  
**S4**.....SUS314+PTFE  
**S6**.....SUS316+PTFE  
**V**.....PVC-CR  
**V2**.....PVC-FKM

⑤ Connection symbol  
**F**.....Flange connection

## Specifications

Model	Connection	Maximum capacity L/min (L/H)	Set pressure MPa	Material			Applicable pump <sup>Note 1</sup>	Wet-end material symbol	Mass kg
				Body	Diaphragm	Rubber			
<b>RV-1PV-15</b>	Flange connection JIS10K15A	1.0 (60)	0.3 to 0.8	PVC	FKM	FKM	EHN/EWN-B11 to 31, C16 to 36 EH-E36 to 46	VC	0.5
<b>RV-1PE-15</b>					EPDM	EPDM			
<b>RV-1PVB-15</b>			FKM		FKM	VC			
<b>RV-1PEB-15</b>			EPDM		EPDM				

Model	Connection	Maximum capacity L/min (L/H)	Set pressure MPa	Material			Applicable pump <sup>Note</sup>	Wet-end material symbol	Mass kg
				Body	Diaphragm	Rubber			
RV-1TV-15	Flange connection JIS10K15A	1.0 (60)	0.3 to 0.8	PVDF	FKM	FKM	EHN-B11 to 31 C16 to 36 EH-E31 to 56	FC	0.5
							LK-11 to 45, SK-11 to 42	TC	
RV-1PV-20	Flange connection JIS10K20A	1.0 (60)	0.3 to 0.8	PVC	FKM	FKM	EHN/EWN-B11 to 31, C16 to 36	VC	0.5
RV-1PE-20							EPDM	EPDM	
RV-1PV-4H	Hose connection Ø4×Ø9	1.0 (60)	0.3 to 0.8	PVC	FKM	FKM	EHN/EWN-B11 to 31, C16 to 36	VC	0.2
RV-1PE-4H							EPDM	EPDM	
RV-1PV-4P	PE tube Ø4×Ø6	1.0 (60)	0.3 to 0.8	PVC	FKM	FKM	EHN/EWN-B11 to 31, C16 to 36	VC	0.2
RV-1PE-4P							EPDM	EPDM	
RV-1PV-8H	Hose connection Ø8×Ø13.5 Ø8×Ø14	1.0 (60)	0.3 to 0.8	PVC	FKM	FKM	SK-31 • 32	VC	0.2
RV-1PE-8H							EPDM	EPDM	
RV-1PV-9P	PE tube Ø9×Ø12	1.0 (60)	0.3 to 0.8	PVC	FKM	FKM	EHN/EWN-B31 C31 • 36	VC	0.2
RV-1PE-9P							EPDM	EPDM	
RV-1PV-12H	Hose connection Ø12×Ø18	1.0 (60)	0.3 to 0.8	PVC	FKM	FKM	LK-11 to 45	VC	0.2
RV-1PE-12H							EPDM	EPDM	
RV-1PV-12P	Hose connection Ø12×Ø16	1.0 (60)	0.3 to 0.8	PVC	FKM	FKM	SK-41 • 42	VC	0.2
RV-1PE-12P								EPDM	
RV-1PV-13E	Hose connection Ø13×Ø20	1.0 (60)	0.3 to 0.8	PVC	FKM	FKM	SK-41 • 42	VC	0.2
RV-1PE-13E								EPDM	
RV-3T□-15	JIS10K 15A DIN PN10 DN15 ANSI 150LB1/2 <sup>Note3</sup>	3.0 (180)	0.3 to 1.0 standard : 0.5	PVDF	PTFE	FKM EPDM	IX-B IX-C060	TC • TE	0.7
RV-3T□-20	JIS10K 20A						IX-C150 IX-D150		0.8
RV-3T□-MS	Hose connection Ø4×Ø6, Ø4×Ø9	3.0 (180)	0.3 to 1.7 <sup>Note2</sup> standard : 0.5	PVDF	PTFE	FKM EPDM	IX-B	TC • TE	0.5
RV-3T□-ML	Hose connection Ø8×Ø13, Ø9×Ø12								
RV-3T□-R	R1/2	3.0 (180)	0.3 to 1.7 <sup>Note2</sup> standard : 0.5	PVDF	PTFE	FKM EPDM	IX-B	TC • TE	0.5
RV-3T□-N	1/2NPT								
RV-3T□-G	G3/4	3.0 (180)	0.3 to 1.7 <sup>Note2</sup> standard : 0.5	PVDF	PTFE	FKM EPDM	IX-B	TC • TE	0.5
RV-3P-15	JIS10K15A								
RV-3P-15	JIS10K15A	3.0 (180)	0.3 to 1.0	PVC	PTFE	—	EH-E56 LK-11 to 47, TD-01 to 2 AXJ-L07 to 30	VC • VH V6 • VS	0.6
RV-3P-20	JIS10K20A	3.0 (180)	0.3 to 1.0	PVC	PTFE	—	EH-E56 AXJ-L07 to 30	VC • VH	0.6
RV-3P-25	JIS10K25A	3.0 (180)	0.3 to 1.0	PVC	PTFE	—	LK-47	VS	0.9
RV-3PV-12H	Hose connection Ø12×Ø18						EH-E56 IX-C150 • D150	TC • TE	
RV-3PE-12H		PE tube Ø12×Ø16	3.0 (180)	0.3 to 1.0	PVC	PTFE	FKM EPDM	LK-55 • A55 AXJH-L42 AXK-L30 • 42 AXA-L42	VC • VE
RV-3PV-12P	TD-01 to 1 SK-41 • 42							VC	
RV-3PE-12P	Hose connection Ø13×Ø20	3.0 (180)	0.3 to 1.0	PVC	PTFE	FKM EPDM	SK-41 • 42	VE • V6 • VS	0.4
RV-3PV-13E								VC	
RV-3PE-13E	Hose connection Ø13×Ø20	3.0 (180)	0.3 to 1.0	PVC	PTFE	FKM EPDM	SK-41 • 42	VE	0.4
RV-7TV-15								JIS10K15A	
RV-7TE-15	JIS10K20A	7.5 (450)	0.3 to 0.8 0.8 to 1.0	PVC	PTFE	—	IX-B • C060	TC	5
RV-7V-20							EPDM	IX-B • C060	
RV-7VB-20	JIS10K20A	7.5 (450)	0.3 to 0.8 0.8 to 1.0	PVC	PTFE	—	LK-45 • 47	VC • VH	3.5
RV-7V-25	JIS10K25A						LK-55 • 57, A55 • A57 AXK-L42 • 52 AXK-L68 AXA-L42 • 52 AXB-L52		
RV-7VB-25	JIS10K25A	7.5 (450)	0.3 to 0.8 0.8 to 1.0	PVC	PTFE	—	LK-A55	VC • VH	3.5
RV-7TV-25	JIS10K25A						7.5 (450)		
RV-7TE-25	JIS10K25A	7.5 (450)	0.3 to 0.8	PVC	PTFE	EPDM	IX-D300	TE	5
RV-25V-25							JIS10K25A	25 (1,500)	

Overfeeding Prevention
Siphon Prevention
Chemical Solution Backflow Prevention
Overpressure Prevention
Pulsation Damping
Piping Vibration Damping
Flow Proportional Control
Discharge Check
Pressure Check
Gas Lock Prevention
Piping Connection
Contamination Prevention
Others

Overfeeding Prevention  
Siphon Prevention  
Chemical Solution Backflow Prevention  
Overpressure Prevention  
Pulsation Damping  
Piping Vibration Damping  
Flow Proportional Control  
Discharge Check  
Pressure Check  
Gas Lock Prevention  
Piping Connection  
Contamination Prevention  
Others

Model	Connection	Maximum capacity L/min (L/H)	Set pressure MPa	Material			Applicable pump <sup>Note</sup>	Wet-end material symbol	Mass kg
				Body	Diaphragm	Rubber			
RV-25TV-25	JIS10K25A	25 (1,500)	0.3 to 0.8	PVDF	PTFE	FKM	LK-A65, B65	TC	5
RV-25TE-25						EPDM		TE	
RV-25V-40	JIS10K40A	25 (1,500)	0.3 to 0.8	PVC	PTFE	—	LK-A65 • B65 AXA-L68 • 85 AXB-L68	VC • VE • VSA	4.0
RV-25TV-40	JIS10K40A	25 (1,500)	0.3 to 0.8	PVDF	PTFE	FKM	LK-A65 • B65	TC	5.5
RV-25TE-40						EPDM		TE	
RV-25V-50	JIS10K50A	25 (1,500)	0.3 to 0.8	PVC	PTFE	—	LK-B75 • C76 AXA-L100 AXB-L85	VC • VS4 • VS	4.5
N50RV-5V-F		50 (3,000)				0.15 to 0.5	CR	CR	
N50RV-5V2-F	JIS10K65A	70 (4,200)	FKM	FKM	LK-C86 • 87 AXB-L100 • 122		VC		
N65 • 50RV-5V-F			JIS10K65A	70 (4,200)			CR	CR	VS4 • VS
N65 • 50RV-5V2-F	FKM	FKM			VC				
RV-25S6-15	JIS10 • 16K15A	2.0 (120)	0.3 to 0.8	SUS316 SCS14	PTFE	—	EHN-B11 • 21 C21 • 31 • 36 EH-E31 to 56 LK-11 to 47 TD-01 to 1 AXJ-L07 to 30 IX-B • C060	SH	3.5
RV-25S6B-15			0.8 to 1.5						
RV-7S6-20	JIS10 • 16K20A	7.5 (450)	0.3 to 0.8	SUS316 SCS14	PTFE	—	IX-C150, D150	S6	6
RV-7S6B-20			0.8 to 1.5						
RV-7S6-25	JIS10 • 16K25A	7.5 (450)	0.3 to 0.8	SUS316 SCS14	PTFE	—	LK-55 • 57, A55 • 57 AXK-L30 • 42 AXK-L42 • 52 AXK-L68 AXA-L42 • 52 AXB-L52 IX-D300	S6	6
RV-7S6B-25			0.8 to 1.5						
RV-25S6-25	JIS10K25A	25 (1,500)	0.3 to 0.8	SUS316 SCS14	PTFE	—	TD-6 to 8 AXK-L68 AXB-L52	S4 • S6	7.5
RV-25S6B-25			0.8 to 1.0						
RV-25S6-40	JIS10K40A	25 (1,500)	0.3 to 0.8	SUS316 SCS14	PTFE	—	LK-A65 • B65 AXA-L68 • 85 AXB-L68	S4 • S6	7.5
RV-25S6B-40			0.8 to 1.0						
RV-25S6-50	JIS10K50A	80 (4,800)	0.3 to 0.8	SUS316 SCS14	PTFE	—	LK-B75 • C76 AXA-L100 AXB-L85	S4 • S6	8.7
N50RV-5S6-F			0.15 to 0.5						29
N65RV-5S6-F	JIS10K65A	120 (7,200)	0.15 to 0.5	SUS316 SCS14	PTFE	—	LK-C86 • 87 AXB-L100 • 122	S4 • S6	42

Note1: Hose flange is required for use with EHN, EWN, EH-E.  
 Note2: When connecting a hose, use it at a hose normal pressure or less.  
 Note3: The flange is a shared product that complies with the standards listed in the table.  
 \* External dimensions are the same as the back pressure valve. See Page 13 for details.

**Dimensions (mm)**

- B(R)V-1P□-15/20
- B(R)V-1P-4H
- B(R)V-1P□-□□
- B(R)V-1TV

Model	L	H
B(R)V-1P□-15	(224)	67
B(R)V-1P□-20	(388)	67
B(R)V-1P-4H	(114)	67
B(R)V-1P□-□□	(114)	(67)
B(R)V-1TV-15	(224)	67

\*B(R)V-1PV/E-4P is (108).

- N50B(R)V-5V□-F/R65-50B(R)V-5V□-F
- N50/65B(R)V-5S6-F

Model	L	H	H1
B(R)V-3P□-15/20/25	234	(89)	(71)
B(R)V-3P□-12H/12P/13E	(124)	(89)	(71)
B(R)V-3T□-15	201	(101)	(73)
B(R)V-3T□-20	219	(101)	(73)
B(R)V-7T□-15	(234)	(184)	(145)
B(R)V-7T/V□-25	234	(184)	(145)
B(R)V-7V□-20	232	(184)	(145)
B(R)V-7F-C17/C18	(179)	(184)	(145)
B(R)V-25V□-25	236	(191)	(153)
B(R)V-25T□-25	256	(193)	(153)
B(R)V-25V□-40	287	(191)	(153)
B(R)V-25T□-40	287	(193)	(153)
B(R)V-25V□-50	600	(191)	(153)

- B(R)V-3P□-15/20/25/12H/12P/13E
- B(R)V-3TV-15/20
- B(R)V-7T□-15/25
- B(R)V-7V□-20/25
- BV-7F-C17/C18
- B(R)V-25V□-25/40/50
- B(R)V-25TV-25/40
- B(R)V-2S6□-15
- BV-2S6-C17/C18
- B(R)V-7S6□-20
- B(R)V-7S6□-25
- B(R)V-25S6□-25/40
- B(R)V-25S6-50

Model	L	H	H1
B(R)V-2S6□-15	158	(172)	(131)
B(R)V-2S6-C17/C18	158	(172)	(131)
B(R)V-7S6□-20	208	(196)	(157)
B(R)V-25S6□-25/40	210	(202)	(164)
B(R)V-25S6-50	363	(202)	(164)

• These dimensions apply to both back pressure valves and relief valves.

# Dampener

Installed on the discharge side. Reduces pulsation and prevents piping vibration.



AQ-10T□-□

AQ-85T□-□

## Model identification

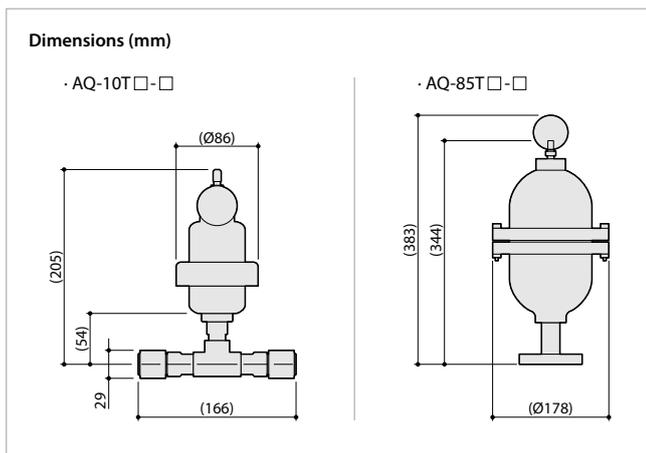
① AQ - ② 10T V - ③ □ ④ □

- ① Series symbol  
**AQ** .....Dampener
- ② Capacity symbol  
**10T** .....164 ml  
**85T** .....1.4 l
- ③ Rubber material symbol  
**V** .....FKM  
**E** .....EPDM
- ④ Connection symbol  
**None** ..... Hose connection Ø4×Ø9/Ø4×Ø6  
**4** ..... Hose connection Ø8×Ø13  
**15F** ..... Flange connection 15A  
**20F** ..... Flange connection 20A

## Specifications

Model	Connection	Capacity ml	Pressure range MPa Discharge line, filling gas	Material			Applicable pump	Wet-end material symbol				
				Body	Bladder	O-ring						
<b>AQ-10TV</b>	Hose connection Ø4×Ø9 Ø4×Ø6	164	0.05 to 0.5	PVDF + PVC	FKM	FKM	EHN/EWN-B11・16・21, C16・21	VC・TC				
<b>AQ-10TE</b>					EPDM	EPDM	IX-B007・015	VH・TE				
<b>AQ-10TV-4</b>	FKM				FKM	EHN/EWN-B31・C31・36	VC・TC					
<b>AQ-10TE-4</b>	EPDM				EPDM	IX-B030・045 EH-E31・36・46	VH・V6・TE					
<b>AQ-85TV-15F</b>	Flange connection JIS10K15A	1,400		0.05 to 0.5	PVDF	FKM	FKM	IX-C060	TC			
<b>AQ-85TE-15F</b>						EPDM	EPDM		TE			
<b>AQ-85TV-20F</b>	Flange connection JIS10K20A					1,400	0.05 to 0.5	PVDF	FKM	FKM	IX-C150・D150	TC
<b>AQ-85TE-20F</b>									EPDM	EPDM		TE

\* Please consult with us for other connections for EH-E, which will be custom-made.  
 \*The AQ-85 series is not in standard stock, so please contact us for the delivery date.



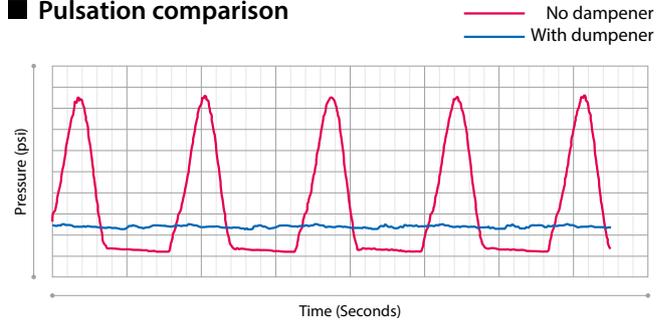
### Purpose of use

- Pulsation damping
- Piping vibration damping

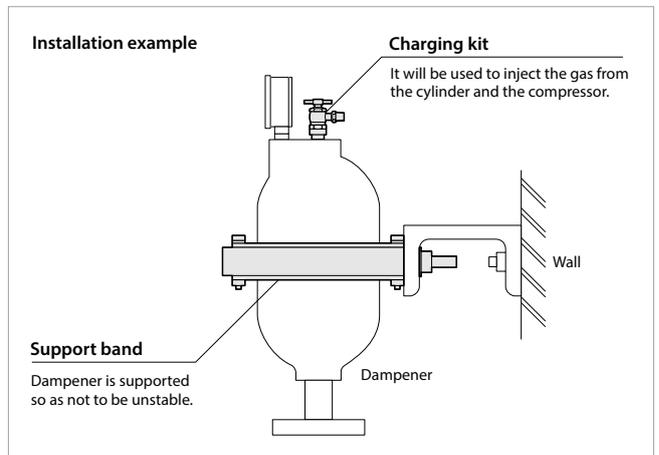
### Applicable pump models

- EHN
- EWN
- EH-E
- IX-B/C/D

## Pulsation comparison



## Options



- Overfeeding Prevention
- Siphon Prevention
- Chemical Solution Backflow Prevention
- Overpressure Prevention
- Pulsation Damping
- Piping Vibration Damping
- Flow Proportional Control
- Discharge Check
- Pressure Check
- Gas Lock Prevention
- Piping Connection
- Contamination Prevention
- Others

# Air chamber

Prevents piping vibration and overfeeding by suppressing the pulsation unique to a reciprocating pump.



Purpose of use

- Overfeeding prevention
- Siphon prevention
- Piping vibration damping

Applicable pump models

- LK
- AX
- SK
- IX-B/C/D

## Model identification



- ① Series symbol  
**A**.....Air chamber
- ② Capacity symbol  
**05** ..... 0.5 L  
**1** ..... 1.0 L  
**2** ..... 2.0 L  
**5** ..... 5.0 L  
**10** ..... 10 L  
**20** ..... 20 L  
**36** ..... 36 L
- ③ Material symbol  
**S6** ..... SUS316  
**V** ..... PVC  
④ O-ring symbol  
**V** ..... FKM  
**E** ..... EPDM
- ⑤ Connection symbol  
**None** ..... 15 A·25 A  
Common flange  
**10** ..... 10 A flange  
**15** ..... 15 A flange  
**20** ..... 20 A flange
- ⑥ Special symbol  
**25** ..... 25 A flange  
**40** ..... 40 A flange  
**50** ..... 50 A flange  
**65** ..... 65 A flange  
**None** ..... JIS10K flange connection
- ⑦ Special symbol  
**A** ..... ANSI flange connection  
(Material symbol S6 only)  
**S** ..... Non-standard custom-made specifications



- ① Type symbol  
**N** ..... N type
- ② Connection symbol  
**40** ..... 40 A flange  
**50** ..... 50 A flange  
**65** ..... 65 A flange
- ③ Capacity symbol  
**10** ..... 10 l  
**20** ..... 20 l  
**30** ..... 30 l
- ④ Material symbol  
**S6** ..... SUS316  
**V** ..... PVC
- ⑤ O-ring symbol  
**None** ..... CR  
**2** ..... FKM
- ⑥ Special symbol  
**None** ..... JIS10K flange connection  
**S** ..... Non-standard custom-made specifications

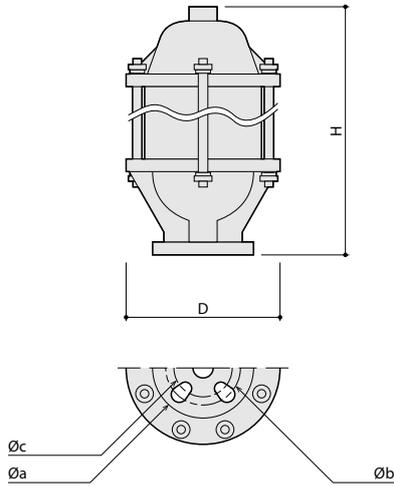
## Specifications

Model	Flange connection	Capacity L	Maximum pressure MPa	Material		Applicable pump	Wet-end material symbol	Mass kg				
				Body	O-ring							
<b>A-1VV</b>	JIS10K15 to 25A (common)	1.0	0.5	PVC	FKM	SK, LK-11 to 45 IX-B · C060	VC	2				
<b>A-1VE</b>						SK, LK-11 to 45 IX-B · C060	TC					
<b>A-2VV</b>		2.0				LK-47	VC · TC					
<b>A-2VE</b>						IX-C150 · D150	VH · TE					
<b>A-5VV</b>						5.0	LK-55 · 57 LK-A55 · 57 IX-D300		VH · TE			
<b>A-5VE</b>	CR	VC · TC										
<b>N40A-10V-F</b>	JIS10K40A	10	0.5	PFA Lining	PTFE	LK-A65 · B65	VH · VS4	16				
<b>N40A-10V2-F</b>						FKM	VC					
<b>N50A-20V-F</b>	JIS10K50A	20				CR	LK-B75 · C76		VH · VS4			
<b>N50A-20V2-F</b>						FKM	VC					
<b>N65A-30V-F</b>	JIS10K65A	30				CR	LK-C86 · 87		VH · VS4			
<b>N65A-30V2-F</b>			FKM	VC								
<b>A-05TC-15</b>	JIS10K15A equivalent	0.5	0.5	PFA Lining	PTFE	LK-11 · 21 · 22 · 31 · 32	TC	12				
<b>A-1TC-15</b>	JIS10K25A equivalent	1.0				LK-45		28				
<b>A-1TC-25</b>	JIS10K15A equivalent	2.0				LK-47		20				
<b>A-2TC-20</b>	JIS10K20A equivalent					3.0		LK-55 · 57 LK-A55 · 57	16			
<b>A-2TC-25</b>	JIS10K25A equivalent	47										
<b>A-3TC-25</b>	JIS10K25A equivalent	50										
<b>A-5TC-25</b>	JIS10K40A equivalent	10				LK-A65 · B65		70				
<b>A-10TC-40</b>	JIS10K50A equivalent	20				AX		95				
<b>A-05S6-10</b>	JIS10K10A	0.5				0.9		SUS316	—	SK, LK-11 · 21 · 22 · 31 · 32 IX-B	S6	3
<b>A-05S6-15</b>	JIS10K15A									1.5	LK-45 · 47 AX IX-C060 · C150 · D150	S6
<b>A-05S6-20</b>	JIS10K20A	5.0	LK-A55 · A57 AX IX-D300	S6 · S4	12							
<b>A-15S6-15</b>	JIS10K15A		10	LK-A65 · B65 AX	S6 · S4		15					
<b>A-15S6-20</b>	JIS10K20A	20		LK-B75 · C76 AX	S6 · S4		29					
<b>A-15S6-25</b>	JIS10K25A		36	LK-C86 · C87 AX	S4		55					
<b>A-5S6-25</b>	JIS10K25A	5.0		SUS316	—		S6 · S4			12		
<b>A-5S6-40</b>	JIS10K40A											
<b>A-10S6-40</b>	JIS10K40A	10	0.9	SUS316	—		S6 · S4			15		
<b>A-10S6-50</b>	JIS10K50A											
<b>A-20S6-50</b>	JIS10K50A	20	0.9	SUS316	—	S6 · S4	29					
<b>A-20S6-65</b>	JIS10K65A											
<b>A-36S6-65</b>	JIS10K65A	36	0.9	SUS316	—	S6 · S4	55					

\* Standard bolt is made of SUS.

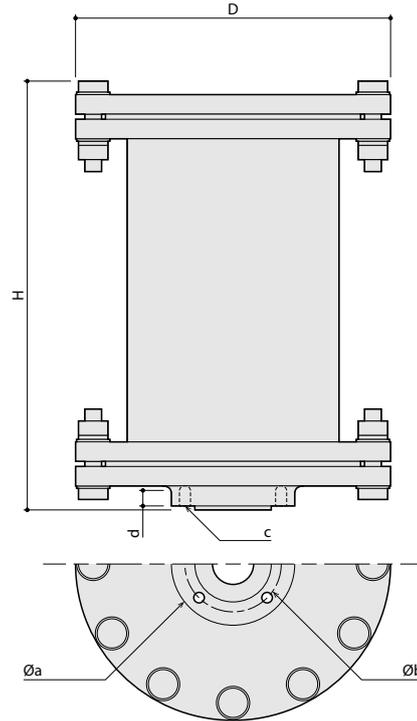
Dimensions (mm)

- A-1V □
- A-2V □
- A-5V □



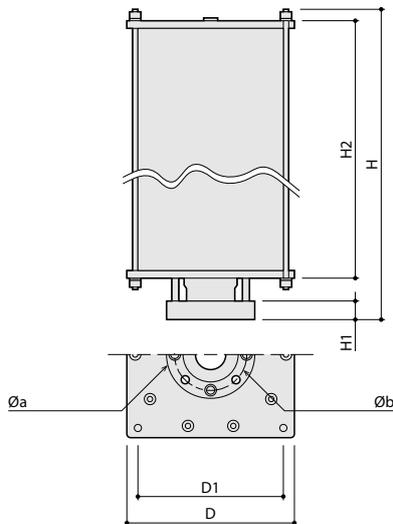
Model	H	D	a	b	c
<b>A-1V</b> □	(214)	Ø186	Ø125	Ø90	Ø70
<b>A-2V</b> □	(281)	Ø186	Ø125	Ø90	Ø70
<b>A-5V</b> □	(526)	Ø186	Ø125	Ø90	Ø70

- A-05TC-15
- A-1TC-15/25
- A-2TC-15/20/25
- A-3TC-25
- A-5TC-25
- A-10TC-40
- A-20TC-50



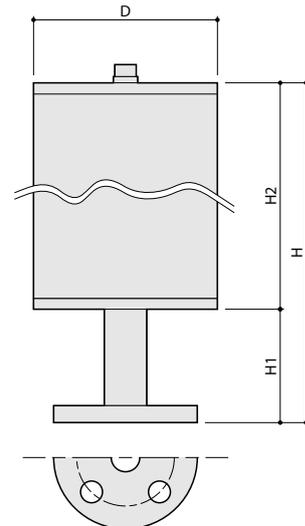
Model	H	D	a	b	c	d
<b>A-05TC-15</b>	(538)	Ø140	Ø95	Ø70	4×M12	16
<b>A-1TC-15</b>	(377)	Ø185	Ø95	Ø70	4×M12	16
<b>A-1TC-25</b>	(324)	Ø185	Ø125	Ø90	4×M12	16
<b>A-2TC-15</b>	(451)	Ø210	Ø95	Ø70	4×M12	16
<b>A-2TC-20</b>	(451)	Ø210	Ø100	Ø75	4×M12	16
<b>A-2TC-25</b>	(398)	Ø210	Ø125	Ø90	4×M16	16
<b>A-3TC-25</b>	(304)	Ø280	Ø125	Ø90	4×M16	16
<b>A-5TC-25</b>	(404)	Ø280	Ø125	Ø90	4×M16	16
<b>A-10TC-40</b>	(507)	Ø330	Ø140	Ø105	4×M16	16
<b>A-20TC-50</b>	(601)	Ø400	Ø155	Ø120	4×M16	20

- N40A-10V □-F
- N50A-20V □-F
- N65A-30V □-F



Model	H	H1	H2	D	D1	a	b
<b>N40A-10V</b> □-F	(790)	30	698	208	170	140	105
<b>N50A-20V</b> □-F	(920)	40	818	266	230	155	120
<b>N65A-30V</b> □-F	(865)	37	766	330	290	Ø175	Ø140

- A-05S6-□
- A-1S6-□
- A-5S6-□
- A-10S6-□
- A-20S6-□
- A-36S6-65



Model	H	H1	H2	D
<b>A-05S6-□</b>	(200)	70	(130)	Ø89.5
<b>A-1S6-□</b>	(270)	80	(190)	Ø115
<b>A-5S6-□</b>	(420)	100	(320)	Ø166
<b>A-10S6-□</b>	(680)	100	(580)	Ø166
<b>A-20S6-□</b>	(800)	120	(680)	Ø217
<b>A-36S6-65</b>	(680)	130	(550)	Ø319

Overfeeding Prevention

Siphon Prevention

Chemical Solution Backflow Prevention

Overpressure Prevention

Pulsation Damping

Piping Vibration Damping

Flow Proportional Control

Discharge Check

Pressure Check

Gas Lock Prevention

Piping Connection

Contamination Prevention

Others

## Pulse transmission type flow meter

Outputs a pulse in direct proportion to the flow rate of treated water to control the pump.



Purpose of use

Flow proportional control

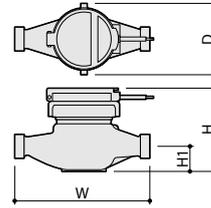
Applicable pump models

EHN

EH-E

EWN

Dimensions (mm)



Model	W	H	H1	D
LNB-13	165	117	34.5	100
LNB-20	190	117	35	100
LNB-25	225	117	35	100

### Specifications

Model	Connection diameter	Flow rate range	Pulse type (L/P)	Applicable pump
LNB-13 RC-A	Thread connection 13 mm	0.05-2.0 m <sup>3</sup> /hr	01: 0.1L/P, 05: 0.5L/P	EHN/EWN-B/C EH-E
LNB-13 RC-B			1: 1L/P, 5: 5L/P, 10: 10L/P, 100: 100L/P, 500: 500L/P	
LNB-13 RC-C			50: 50L/P, 1000: 1m3/P	
LNB-20 RC-A	Thread connection 20 mm	0.05-2.5 m <sup>3</sup> /hr	01: 0.1L/P, 05: 0.5L/P	
LNB-20 RC-B			1: 1L/P, 5: 5L/P, 10: 10L/P, 100: 100L/P, 500: 500L/P	
LNB-20 RC-C			50: 50L/P, 1000: 1m3/P	
LNB-25 RC-A	Thread connection 25 mm	0.05-3.0 m <sup>3</sup> /hr	01: 0.1L/P, 05: 0.5L/P	
LNB-25 RC-B			1: 1L/P, 5: 5L/P, 10: 10L/P, 100: 100L/P, 500: 500L/P	
LNB-25 RC-C			50: 50L/P, 1000: 1m3/P	

## Flow counter/Controller

The pressure sensor detects pulsation to monitor the flow. Air lock and hose disconnection are also can be detected.

Purpose of use

Discharge check

Applicable pump models

EHN

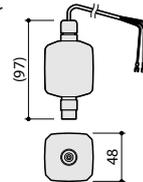


Flow counter

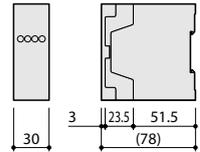
Controller

Dimensions (mm)

-Flow counter



-Controller



### Model identification (flow counter)

FCP - 1VC  
①                      ②

① Series symbol  
FCP .....Flow counter

② Material symbol  
1VC .....PVC • FKM  
1VE .....PVC • EPDM  
1PC .....GFRPP • FKM  
1PE .....GFRPP • EPDM

### Specifications (flow counter)

Model	Material			Applicable pump	Wet-end material symbol
	Sensor	Body	Rubber		
FCP-1VC	Alumina Ceramics	PVC	FKM	EHN-B11 • 16 • 21, C16 • 21	VC
FCP-1VE			EPDM		VH
FCP-1PC		GFRPP	FKM		PC
PCP-1PE			EPDM		PH

- Power supply voltage: DC12V
- Pulse output pressure range: 0.3-1.0 MPa
- Output method: Open collector (NPN type)

### Specifications (controller)

Model	Electrical specifications				Applicable pump	Remarks
	Power supply voltage	Installation method	Output	Alarm time		
S3D2-CK	AC 100-240 V	DIN rail	Relay output (1c)	0.1 to 1 s 1 to 10 s	EHN-B11 • 16 • 21, C16 • 21	Made by Omron

# Flow checker

FCM type detects the liquid feeding on the suction side of the electromagnetic metering pump and outputs the liquid feeding status as a pulse. It can calculate the total number of pump shots and detect poor feeding of the liquid. FC type checks the discharge by detecting the move of the float inside the piping.

Purpose of use

Discharge check

Applicable pump models

EHN

LK

EH-E

AX



FCM-VC-2



FC-15



FC-HV-MS

## Model identification (FCM type)

FCM type

**FCM - VC - 1**  
 ①                      ②                      ③

- ① Series symbol  
**FCM** ..... Flow checker
- ② Material symbol  
**VC** ..... PVC • FKM  
**VE** ..... PVC • EPDM
- ③ Hose connection symbol  
**1** .....  $\varnothing 4 \times \varnothing 9$   
**2** .....  $\varnothing 4 \times \varnothing 6$

FC type

**FC - HV - MS**  
 ①                      ②                      ③

- ① Series symbol  
**FC** ..... Flow checker
- ② Material symbol  
**None** ..... PVC • PTFE  
**HV** ..... PVC • FKM  
**HE** ..... PVC • EPDM
- ③ Connection symbol  
**15** ..... Flange connection JIS10K15AFF  
**15A** ..... Flange connection ANSI 150LB 1/2FF  
**20** ..... Flange connection JIS10K20AFF  
**25** ..... Flange connection JIS10K25AFF  
**25A** ..... Flange connection ANSI 150LB 1FF  
**4H** ..... Hose connection  $\varnothing 4 \times \varnothing 9$   
**8H** ..... Hose connection  $\varnothing 8 \times \varnothing 13$   
**12H** ..... Hose connection  $\varnothing 12 \times \varnothing 18$   
**MS** ..... Hose connection  $\varnothing 4 \times \varnothing 9 / \varnothing 4 \times \varnothing 6$   
**ML** ..... Hose connection  $\varnothing 8 \times \varnothing 13 / \varnothing 9 \times \varnothing 12$

## Specifications

FCM type

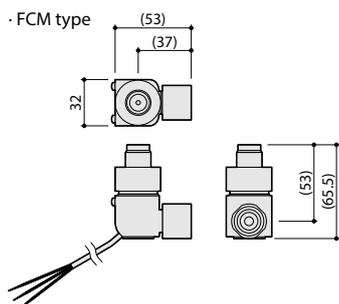
Model	Hose connection	Material		Applicable pump	Wet-end material symbol
		Body	Rubber		
<b>FCM-VC-1</b>	$\varnothing 4 \times \varnothing 9$	PVC	FKM	EHN-B11 • 16 • 21, C16 • 21	VC
<b>FCM-VE-1</b>			EPDM		VH
<b>FCM-VC-2</b>	$\varnothing 4 \times \varnothing 6$		FKM		VC
<b>FCM-VE-2</b>			EPDM		VH

- Power supply voltage: DC 5-24 V
- Output method: Open collector (NPN type)
- Operating pressure range: 0.2 MPa or more (upper limit depends on the specifications of the applicable pump)
- Operating flow rate range: 0.1 ml/shot or more (upper limit depends on the specifications of the applicable pump)

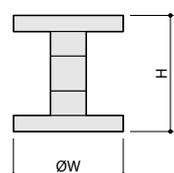
FC type

Model	Connection	Capacity L/min	Maximum pressure MPa	Material	Applicable pump	Wet-end material symbol
<b>FC-15</b>	Flange connection JIS10K15AFF	0.01 to 2.00	0.5	Valve case, Stopper, Flange PVC Valve PTFE	LK-11 • 21 • 22 31 • 32 • 45 AXJ-07 to 30 LK-47	VC • VH
<b>FC-15A</b>	Flange connection ANSI 150LB 1/2FF				AXJ-07 to 30	VC • VH
<b>FC-20</b>	Flange connection JIS10K20AFF					VC • VH
<b>FC-25</b>	Flange connection JIS10K25AFF	0.5 to 10.0			LK-55 • 57 LK-A55 • 57 AXJ-42	VC • VH
<b>FC-25A</b>	Flange connection ANSI 150LB 1FF	0.01 to 0.20			EHN-B11 • 16 • 21, C16 • 21 LK-11 • 21 • 22	VC • VH
<b>FC-4H</b>	Hose connection $\varnothing 4 \times \varnothing 9$				EHN-B31 • C31 • 36 EH-E31 • 36 • 46	VC • VH • V6
<b>FC-8H</b>	Hose connection $\varnothing 8 \times \varnothing 13$	0.01 to 1.00	LK-31 • 32 • 45 • 47	VC • VH		
<b>FC-12H</b>	Hose connection $\varnothing 12 \times \varnothing 18$	0.01 to 2.00	EHN-B11 • 16 • 21, C16 • 21 LK-11 • 21 • 22	VC • VH		
<b>FC-H(V/E)-MS</b>	Hose connection $\varnothing 4 \times \varnothing 9 / \varnothing 4 \times \varnothing 6$	0.01 to 0.20	0.9	Body: PVC O ring HV: FKM HE: EPDM	EHN-B31 • C31 • 36 EH-E31 • 36 • 46 LK-31 • 32 • 45 • 47	VC • VH • V6
<b>FC-H(V/E)-ML</b>	Hose connection $\varnothing 8 \times \varnothing 13 / \varnothing 9 \times \varnothing 12$	0.01 to 2.00			VC • VH • V6	

### Dimensions (mm)

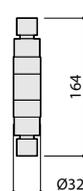


· FC type  
 · FC-15/15A/20/25/25A

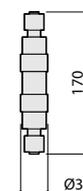


Model	W	H
<b>FC-15</b>	95	100
<b>FC-15A</b>		100
<b>FC-20</b>	100	114
<b>FC-25</b>	125	125
<b>FC-25A</b>		

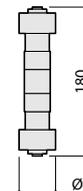
· FC-4



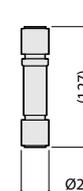
· FC-8H



· FC-12H



· FC-H(V/E)-□



# Measuring cylinder for calibration

Used to calibrate the discharge rate of the pump. Installed on the suction side to measure the suction amount.



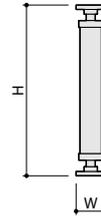
Purpose of use

Discharge check

Applicable pump models

IX-B/C/D

Dimensions (mm)



Model	H	W
CC-PVC-500-FD	419	89
CC-PVC-1000-FD	521	89
CC-PVC-2000-FD	635	108
CC-PVC-4000-FD	686	108

## Model identification

**CC - PVC - 500 - FD**  
①                      ②                      ③                      ④

- ① Series symbol  
CC.....Measuring cylinder for calibration
- ② Material symbol  
PVC.....PVC
- ③ Capacity symbol  
500.....500 mL  
1,000.....1,000 mL  
2,000.....2,000 mL  
4,000.....4,000 mL
- ④ Connection symbol  
FD.....DIN standard flange

## Specifications

Model	Connection	Capacity mL	Material	Applicable pump	Wet-end material symbol
CC-PVC-500-FD	DIN15	500	PVC	IX-B	TC・TE
CC-PVC-1000-FD	DIN15	1,000		IX-C060	TC・TE
CC-PVC-2000-FD	DIN20	2,000		IX-C/D150	TC・TE
CC-PVC-4000-FD	DIN25	4,000		IX-D300	TC・TE

# Pressure gauge set

A convenient unit that combines a pressure gauge and a stop valve. Necessary to check the discharge pressure and control air supply to the air chamber. PVC type and SUS type are available.



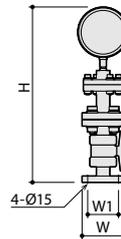
Purpose of use

Pressure check

Applicable pump models

EHN                      SK  
EH-E                      AX  
LK                          IX-B/C/D  
TD

Dimensions (mm)



Type	H	W	W1
PVC type Ball valve type	(406)	Ø95	Ø70
PVC type Diaphragm valve type	(373)	Ø95	Ø70
SUS316 type	(413)	Ø95	Ø70

## Specifications

Type	Line up	Connection diameter	Maximum pressure MPa	Material		
				Valve	Diaphragm	Sealing material
PVC type	0.3 MPa × Ø100 × 15A	Flange Connection 15 A	0.3	PVC	PTFE	FKM (ball valve FKM type) EPDM (ball valve EPDM type) PTFE (diaphragm valve type)
	0.5 MPa × Ø100 × 15A		0.5			
	0.6 MPa × Ø100 × 15A		0.6			
	1.0 MPa × Ø100 × 15A		1.0			
SUS316 type	0.3 MPa × Ø100 × 15A		0.3	SUS316	PTFE	PTFE
	0.5 MPa × Ø100 × 15A		0.5			
	0.6 MPa × Ø100 × 15A	0.6				
	1.0 MPa × Ø100 × 15A	1.0				

## Air vent valve unit

A valve unit for venting gas when transferring a liquid like sodium hypochlorite which easily generates gas.



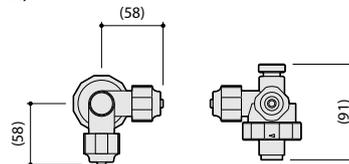
### Purpose of use

Gas lock prevention

### Applicable pump models

EH-E

### Dimensions (mm)



### Specifications

Model	Connection hose	Material		Applicable pump	Wet-end material symbol
		Body	Rubber		
AV-E30/35VC-4	Ø8×Ø13	PVC	FKM	EH-E31・36	VC
AV-E30/35V6-4			EPDM		V6
AV-E30/35PC-4		GFRPP	FKM	EH-E46	PC
AV-E45VC-4		PVC			VC
AV-E45V6-4		EPDM	V6		
AV-E45PC-4		GFRPP	FKM	PC	
AV-E55VC-11	Ø10×Ø16	PVC	EPDM	EH-E56	VC・VM
AV-E55V6-11					V6
AV-E55PC-11		GFRPP	FKM	PC	

## Degassing joint

Attached to the suction side of the pump to prevent mixing of gas when transferring a liquid like sodium hypochlorite which easily generates gas.



DG-VC/VH



AJ-V4

### Purpose of use

Gas lock prevention

### Applicable pump models

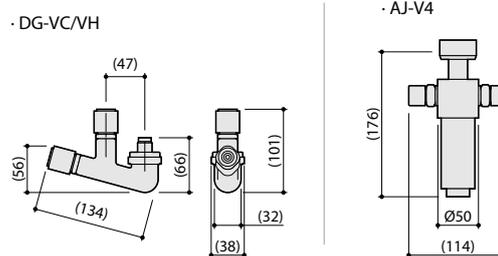
EHN

LK

EWN

SK

### Dimensions (mm)



### Specifications

Model	Connection hose		Material		Applicable pump	Wet-end material symbol
	Joint inlet	Gas vent	Body	Rubber		
DG-VC	Ø4×Ø6	Ø8×Ø13	PVC	FKM	EHN/EWN-B11・16・21, C16・21	VC
	Ø4×Ø9			EPDM		
DG-VH	Ø4×Ø6					
	Ø4×Ø9					
AJ-V4	Ø4×Ø9	Ø4×Ø9	PVC	FKM	SK, LK-11・21・22	VC

# Hose flange

An adapter to connect the pump hose to the flange piping. It comes with or without a check valve.

**Purpose of use**

Piping connection

**Applicable pump models**

EHN

LK

EWN

SK

EH-E



Screw-in type with check valve

Screw-in type (No check valve)

Bonded type

Non-multi type

## Specifications

Model	Connection		Body	Material		Applicable pump	Wet-end material symbol			
	Hose	Flange		Rubber	Check valve model					
15FX4	Ø4×Ø9	JIS10K15AFF	PVC	—	—	EHN/EWN-B11・16・21, C16・21 LK-11・22	VC・VH			
15FX8	Ø8×Ø13					EHN/EWN-B31, C31・36 EH-E31・36・46	VC・VH・V6			
15FBX11	Ø10×Ø16					IX-B	VC			
15FCAN-1VC-M	Ø4×Ø9*	JIS10K15AFF	PVC	FKM	CAN-1VC	EHN/EWN-B11・16・21, C16・21	VC			
15FCAN-1VE-M	Ø4×Ø6			EPDM	CAN-1VE		VH			
15FCAN-2VC-M	Ø8×Ø13*			FKM	CAN-2VC		VC			
15FCAN-2VE-M	Ø9×Ø12			EPDM	CAN-2VE		VH			
15FVNXMS	Ø4×Ø9* Ø4×Ø6	JIS10K15AFF	PVC	FKM	—	EHN/EWN-B11・16・21, C16・21	VC			
15FENXMS				EPDM			VH			
15FVNBXMS				PVC/FKM			VC			
15FENBXMS				PVC/EPDM			VH			
15FVNXML	FKM			EHN/EWN-B31, C31・36		VC				
15FENXML	EPDM					VH				
15FVNBXML	FKM					VC・VM				
15FENBXML	EPDM					V6				
15HFVX8	Ø8×Ø13.5			JIS10K15AFF		PVC	FKM	—	SK	VC/VH
15HFEX8	Ø8×Ø14						EPDM			
15HFVX9P	Ø9×Ø12						FKM			
15HFEX9P							EPDM			
15HFVX10H	Ø10×Ø16	FKM	EH-E56		VC・VM					
15HFEX10H		EPDM			V6					
15HF×12	Ø12×Ø18	—	LK-31・32・45・47 TD-01 to 1		VC・VH・V6					
20F×4	Ø4×Ø9	JIS10K20AFF	PVC		—		—		EHN/EWN-B11・16・21, C16・21 LK-11・22	VC・VH
20F×8	Ø8×Ø13								EHN/EWN-B31, C31・36 EH-E31・36・46	VC・V6
20FCAN-1VC-M	Ø4×Ø9*	JIS10K20AFF	PVC		FKM		CAN-1VC		EHN/EWN-B11・16・21, C16・21	VC
20FCAN-1VE-M	Ø4×Ø6			EPDM	CAN-1VE	VH				
20FCAN-2VC-M	Ø8×Ø13*			FKM	CAN-2VC	VC				
20FCAN-2VE-M	Ø9×Ø12			EPDM	CAN-2VE	VH				
20FVNXMS	Ø4×Ø9* Ø4×Ø6	JIS10K20AFF	PVC	FKM	—	EHN/EWN-B11・16・21, C16・21	VC			
20FENXMS				EPDM			VH			
20FVNBXMS				PVC/FKM			VC			
20FENBXMS				PVC/EPDM			VH			
20FVNXML	FKM			EHN/EWN-B31, C31・36		VC				
20FENXML	EPDM					VH				
20FVNBXML	PVC/FKM					VC				
20FENBXML	PVC/EPDM					V6				
25FVNXMS	Ø4×Ø9* Ø4×Ø6			JIS10K25AFF		PVC	FKM	—	EHN/EWN-B11・16・21, C16・21	VC
25FENXMS							EPDM			VH
25FVNBXMS							PVC/FKM			VC
25FENBXMS							PVC/EPDM			VH
25FVNXML	FKM	EHN/EWN-B31, C31・36	VC							
25FENXML	EPDM		VH							
25FVNBXML	PVC/FKM		VC							
25FENBXML	PVC/EPDM		V6							

\* Applicable hose diameter can be switched. Refer to "Connection Diameter of the Multi-connection" on page 34 for details.

## Model identification

No check valve type

<b>15F</b>	<b>VN</b>	<b>B</b>	<b>X</b>	<b>MS</b>
①	②	③		④

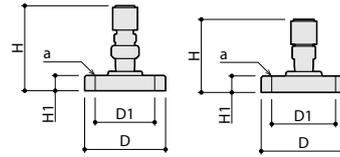
- ① Flange nominal diameter symbol  
**15F/15HF**.....JIS10K15AFF  
**20F**.....JIS10K20AFF  
**25F**.....JIS10K25AFF
- ② Material symbol  
**None**.....PVC  
**VN/V**.....PVC • FKM  
**EN/E**.....PVC • EPDM
- ③ Flange shape symbol  
**None**.....Screw-in type  
**B**.....Bonded type (TS)
- ④ Hose diameter symbol  
**4**..... $\varnothing 4 \times \varnothing 9$ <sup>Note2</sup>  
**8**..... $\varnothing 8 \times \varnothing 13$ <sup>Note1,2</sup>  
**9P**..... $\varnothing 9 \times \varnothing 12$ <sup>Note2</sup>  
**10H/11**..... $\varnothing 10 \times \varnothing 16$ <sup>Note2</sup>  
**12**..... $\varnothing 12 \times \varnothing 18$ <sup>Note2</sup>  
**MS**..... $\varnothing 4 \times \varnothing 9 / \varnothing 4 \times \varnothing 6$ <sup>Note3</sup>  
**ML**..... $\varnothing 8 \times \varnothing 13 / \varnothing 9 \times \varnothing 12$ <sup>Note3</sup>
- Note1 :The hose connection size is slightly different depending on the model. Please refer to the specifications for details.  
 Note2 :Non-multi type  
 Note3 :Multi type

Type with check valve

<b>15F</b>	<b>CAN-1VC</b>	<b>M</b>
①	②	③

- ① Flange nominal diameter symbol  
**15F/15HF**.....JIS10K15AFF  
**20F**.....JIS10K20AFF  
**25F**.....JIS10K25AFF
- ② Check valve model symbol  
**CAN-1VC**.....Small flow rate PVC • FKM  
**CAN-1VE**.....Small flow rate PVC • EPDM  
**CAN-2VC**.....Medium flow rate PVC • FKM  
**CAN-2VE**.....Medium flow rate PVC • EPDM
- ③ Hose diameter symbol  
**M**..... $\varnothing 4 \times \varnothing 9, \varnothing 4 \times \varnothing 6$   
 $\varnothing 8 \times \varnothing 13, \varnothing 9 \times \varnothing 12$
- \* The connectable hose size differs depending on the check valve model symbol. Please refer to the specifications for details.

Dimensions (mm)



Model	H	H1	D	D1	a
<b>15FX</b> □	(58)	18	∅95	∅70	4×∅15
<b>15FBX</b> □	(74)	14	∅95	∅70	4×∅15
<b>15FCAN-□V□-□</b>	(100)	18	∅95	∅70	4×∅15
<b>15F□NX□</b>	(81)	18	∅95	∅70	4×∅15
<b>15F□NBX□</b>	(72)	14	∅95	∅70	4×∅15
<b>15HF□X□</b>	(74)	14	∅95	∅70	4×∅15
<b>20Fx</b> □	(81)	18	∅100	∅75	4×∅15
<b>20FCAN-□</b>	(100)	18	∅100	∅75	4×∅15
<b>20F□NX□</b>	(81)	18	∅100	∅75	4×∅15
<b>20F□NBX□</b>	(77)	15	∅100	∅75	4×∅15
<b>25F□NX□</b>	(83)	20	∅125	∅90	4×∅19
<b>25F□NBX□</b>	(83)	15	∅125	∅90	4×∅19

## T-joint

Used to branch off hose piping.



TJ

TJN

## Specifications

Model	Connection hose	Material		Applicable pump	Wet-end material symbol
		Body			
<b>TJ-4H</b>	∅4×∅9	PVC		EHN/EWN-B11 • 16 • 21, C16 • 21 LK-11 • 21 • 22	VC • VH
<b>TJ-8H</b>	∅8×∅13			EHN/EWN-B31 • C31 • 36 EH-E31 • 36 • 46	
<b>TJ-12H</b>	∅12×∅18			LK-31 • 32 • 45 • 47	
<b>TJN*</b>	∅4×∅6, ∅4×∅9, ∅5×∅8, ∅6×∅8, ∅6×∅11, ∅6×∅12, ∅8×∅13, ∅9×∅12, ∅10×∅12, ∅1/4×∅3/8, ∅3/8×∅1/2	PVC		EHN/EWN- B11 • 16 • 21 • 31, C16 • 21 • 31 • 36	VC • VH

\* The hose connection set is not included and it has to be provided separately. Please select 3 sets of the required size from the table above.

Purpose of use

Piping connection

Applicable pump models

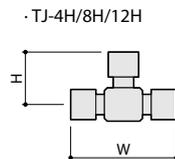
EHN

EH-E

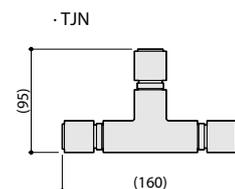
EWN

LK

Dimensions (mm)



Model	W	H
<b>TJ-4H</b>	(84)	(42)
<b>TJ-8H</b>	(90)	(45)
<b>TJ-12H</b>	(120)	(60)



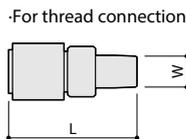


### Model identification

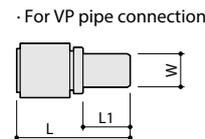
<b>V</b>	<b>4</b>	<b>VN</b>	<b>-</b>	<b>13</b>	<b>-</b>	<b>M</b>
①	②	③		④		⑤

- ① Series symbol  
V.....Hose coupler
- ② Hose diameter symbol  
4..... $\varnothing 4 \times \varnothing 9 / \varnothing 4 \times \varnothing 6$   
8..... $\varnothing 8 \times \varnothing 13 / \varnothing 9 \times \varnothing 12$
- ③ Material symbol  
VN.....PVC・FKM  
EN.....PVC・EPDM
- ④ Piping symbol  
3/8.....R3/8  
1/2.....R1/2  
13.....VP13  
16.....VP16  
20.....VP20
- ⑤ Coupler symbol  
M.....Hose diameter symbol 4  
 $\varnothing 4 \times \varnothing 9 / \varnothing 4 \times \varnothing 6$   
Hose diameter symbol 8  
 $\varnothing 8 \times \varnothing 13 / \varnothing 9 \times \varnothing 12$

#### Dimensions (mm)



Connection	W	L
R3/8	R3/8	(67)
R1/2	R1/2	(67)



Connection	W	L	L1
VP13	VP13	(62)	26
VP16	VP16	(66)	30
VP20	VP20	(71)	35

### Specifications

Model	Connection		Material		Applicable pump	Wet-end material symbol
	Hose	Screw	Body	O-ring		
V4VN-3/8-M	$\varnothing 4 \times \varnothing 9$ $\varnothing 4 \times \varnothing 6$	R3/8	PVC	FKM	EHN/EWN-B11・16・21, C16・21	VC
V4EN-3/8-M				EPDM		VH
V4VN-1/2-M		R1/2		FKM		VC
V4EN-1/2-M				EPDM		VH
V8VN-3/8-M	$\varnothing 8 \times \varnothing 13$ $\varnothing 9 \times \varnothing 12$	R3/8		FKM	EHN/EWN-B31, C31・36	VC
V8EN-3/8-M				EPDM		VH
V8VN-1/2-M		R1/2		FKM		VC
V8EN-1/2-M				EPDM		VH

#### For VP pipe connection

Model	Connection		Material		Applicable pump	Wet-end material symbol	
	Hose	VP pipe	Body	O-ring			
V4VN-13-M	$\varnothing 4 \times \varnothing 9$ $\varnothing 4 \times \varnothing 6$	VP13	PVC	FKM	EHN/EWN-B11・16・21, C16・21	VC	
V4EN-13-M				EPDM		VH	
V4VN-16-M				VP16		FKM	VC
V4EN-16-M						EPDM	VH
V4VN-20-M	$\varnothing 8 \times \varnothing 13$ $\varnothing 9 \times \varnothing 12$	VP20		FKM	EHN/EWN-B31, C31・36	VC	
V4EN-20-M				EPDM		VH	
V8VN-13-M				VP13		FKM	VC
V8EN-13-M						EPDM	VH
V8VN-16-M	VP16	FKM	VC				
V8EN-16-M		EPDM	VH				
V8VN-20-M		VP20	FKM	VC			
V8EN-20-M			EPDM	VH			

\* Applicable hose diameter can be switched.  
Refer to "Connection Diameter of the Multi-connection" on page 34 for details.

## Strainer

Attached at the end of the suction hose. Prevents foreign matter from entering the pump chamber.



#### Purpose of use

Contamination prevention

#### Applicable pump models

EHN

LK

EWN

SK

EH-E

### Model identification

<b>S</b>	<b>-</b>	<b>V</b>	<b>4H</b>
①	②	③	

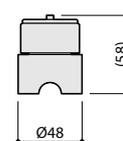
- ① Series symbol  
S.....Strainer
- ② Material symbol  
V.....PVC
- ③ Hose connection symbol  
4H..... $\varnothing 4 \times \varnothing 9$   
8H..... $\varnothing 8 \times \varnothing 13$   
10H..... $\varnothing 10 \times \varnothing 16$   
12H..... $\varnothing 12 \times \varnothing 18$   
12P.....PE tube  $\varnothing 12 \times \varnothing 16$   
13E.....PVC tube  $\varnothing 13 \times \varnothing 20$

### Specifications

Model	Connection	Material		Applicable pump	Wet-end material symbol
		Body	Strainer		
S-V4H	Hose connection $\varnothing 4 \times \varnothing 9$	PVC	ETFE	EHN/EWN-B11・16・21, C16・21 LK-11・21・22	VC・VH・VS
S-V8H	Hose connection $\varnothing 8 \times \varnothing 13.5$ $\varnothing 8 \times \varnothing 14$			SK-31・32	
S-V8H (8×13)	Hose connection $\varnothing 8 \times \varnothing 13$			EHN/EWN-B31, C31・36 EH-E31・36・46	VC・VH・V6
S-V10H	Hose connection $\varnothing 10 \times \varnothing 16$			EH-E56	VC・VH
S-V12H	Hose connection $\varnothing 12 \times \varnothing 18$			LK-31・32・45・47	
S-V12P	PE tube connection $\varnothing 12 \times \varnothing 16$			SK-31・32	VC・VH・VS
S-V13E	PVC tube connection $\varnothing 13 \times \varnothing 20$			SK-31・32	

\* Mesh size: #40

#### Dimensions (mm)



# Strainer with a foot valve

Attached at the end of the suction hose. Prevents foreign matter from entering the pump chamber and water level fall in the suction hose when the pump is stopped.



Purpose of use

Contamination prevention

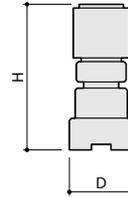
Applicable pump models

EHN

IX-B

EWN

Dimensions (mm)



Model	D	H
<b>FSVN/FSEN/FSPVN/FSPEN-1, 2, 3, MS</b>	Ø33*	(78)
<b>FSVN/FSEN/FSPVN/FSPEN-4, 5, ML</b>		(86)

\*FSTCN type is Ø32

## Model identification

<b>FS</b>	<b>VN</b>	<b>-</b>	<b>1</b>
①	②		③

- ① Series symbol  
**FS**.....Strainer with a foot valve
- ② Material symbol  
**VN**.....PVC • Alumina ceramics • FKM  
**EN**.....PVC • Hastelloy C276 • EPDM  
**PVN**.....GFRPP • Alumina Ceramics • FKM  
**PEN**.....GFRPP • Hastelloy C276 • EPDM  
**TCN**.....PVDF • Alumina Ceramics • FKM
- ③ Hose connection symbol  
**MS**.....Ø4×Ø9, Ø4×Ø6  
**ML**.....Ø8×Ø13, Ø9×Ø12  
**1**.....Ø4×Ø9  
**2**.....Ø4×Ø6  
**3**.....Ø6×Ø8  
**4**.....Ø8×Ø13  
**5**.....Ø9×Ø12

## Specifications

Model	Hose connection	Material				Applicable pump	Wet-end material symbol
		Body	Strainer	Valve	Rubber		
<b>FSVN-1</b>	Ø4×Ø9	PVC	Fluoro resin (ETFE)	Alumina Ceramics	FKM	EHN/EWN-B11 • 16 • 21, C16 • 21	VC
<b>FSVN-2</b>	Ø4×Ø6					EHN/EWN-B11 • 16 • 21, C16 • 21 IX-B007 • 015	TC
<b>FSVN-3</b>	Ø6×Ø8					EHN/EWN-B11 • 16 • 21, C16 • 21	VC
<b>FSVN-4</b>	Ø8×Ø13					EHN/EWN-B31, C31 • C36 IX-B030 • 045	TC
<b>FSVN-5</b>	Ø9×Ø12						
<b>FSEN-1</b>	Ø4×Ø9			Hastelloy C276	EPDM	EHN/EWN-B11 • 16 • 21, EHN-C16 • 21	VH
<b>FSEN-2</b>	Ø4×Ø6					IX-B030 • 045	TE
<b>FSEN-3</b>	Ø6×Ø8					EHN/EWN-B11 • 16 • 21, C16 • 21	VH
<b>FSEN-4</b>	Ø8×Ø13					EHN/EWN-B31, C31 • C36 IX-B030 • 045	TE
<b>FSEN-5</b>	Ø9×Ø12						
<b>FSPVN-1</b>	Ø4×Ø9	GFRPP	Fluoro resin (ETFE)	Alumina Ceramics	FKM	EHN/EWN-B11 • 16 • 21, C16 • 21	PC
<b>FSPVN-2</b>	Ø4×Ø6						
<b>FSPVN-3</b>	Ø6×Ø8						
<b>FSPVN-4</b>	Ø8×Ø13						
<b>FSPVN-5</b>	Ø9×Ø12						
<b>FSPEN-1</b>	Ø4×Ø9			Hastelloy C276	EPDM	EHN/EWN-B11 • 16 • 21, C16 • 21	PH
<b>FSPEN-2</b>	Ø4×Ø6						
<b>FSPEN-3</b>	Ø6×Ø8						
<b>FSPEN-4</b>	Ø8×Ø13						
<b>FSPEN-5</b>	Ø9×Ø12						
<b>FSTCN-2</b>	Ø4×Ø6	PVDF	Fluoro resin (ETFE)	Alumina Ceramics	FKM	IX-B007 • 015	FC
<b>FSTCN-6</b>	Ø10×Ø12					IX-B030 • 045	

\* Mesh size: #20

# Foot valve with a strainer

Attached at the end of the suction hose. Prevents foreign matter from entering the pump chamber and water level fall in the suction hose when the pump is stopped.



## Model identification

**FSCN - 1**  
①                      ②

- ① Series symbol  
**FSCN** .....Foot valve with a strainer
- ② Hose connection symbol  
**MS**.....Ø4×Ø9, Ø4×Ø6  
**ML**.....Ø8×Ø13, Ø9×Ø12  
**1**.....Ø4×Ø9  
**2**.....Ø4×Ø6  
**3**.....Ø6×Ø8  
**4**.....Ø8×Ø13  
**5**.....Ø9×Ø12

## Specifications

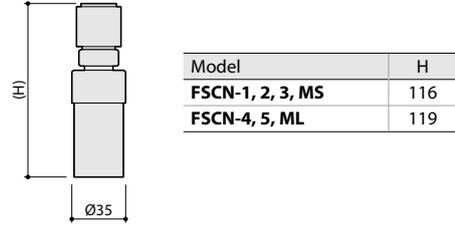
Model	Hose connection	Material				Applicable pump	Wet-end material symbol
		Body	Strainer	Valve ball	Rubber		
<b>FSCN-1</b>	Ø4×Ø9	PVC	PE	Alumina Ceramics	FKM	EHN/EWN-B11 • 16 • 21, C16 • 21	VC
<b>FSCN-2</b>	Ø4×Ø6						
<b>FSCN-3</b>	Ø6×Ø8						
<b>FSCN-4</b>	Ø8×Ø13					EHN/EWN-B31, C31 • C36	
<b>FSCN-5</b>	Ø9×Ø12						

\* Mesh size: #150

**Purpose of use**  
Contamination prevention

**Applicable pump models**  
EHN  
EWN

Dimensions (mm)



# Y-type strainer (Mesh size #40)

Installed in the suction piping to prevent dirt and foreign matter from entering the pump chamber. PVC type and SUS type are available.



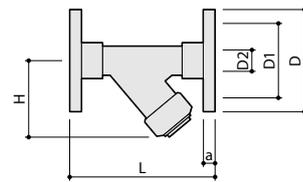
## Specifications

Type	Line up	Flange connection	Material		Applicable pump	Wet-end material symbol
			Body	Sealing material		
<b>PVC type FKM</b>	15 A, FKM	15 A	PVC	FKM	LK-11 to 47	VC
	25 A, FKM	25 A			LK-55 • 57	
<b>PVC type EPDM</b>	15 A, EPDM	15 A		EPDM	LK-11 to 47	VH
	25 A, EPDM	25 A			LK-55 • 57	
<b>SUS type</b>	15 A	15 A	SUS	PTFE	LK-11 to 47	S6
	20 A	20 A			LK-55 • 57	
	25 A	25 A			LK-55 • 57	

**Purpose of use**  
Contamination prevention

**Applicable pump models**  
LK  
AX  
IX-B/C/D

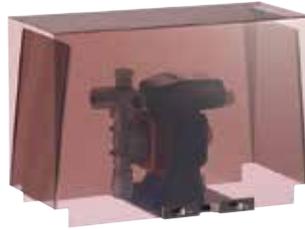
Dimensions (mm)



Type	L	H	D	D1	D2	a
<b>PVC type</b>	(150)	71	Ø95	Ø70	Ø15	14
	(177)	81	Ø125	Ø90	Ø25	14
<b>SUS type</b>	120	58	Ø95	Ø70	Ø15	10
	130	66	Ø100	Ø75	Ø20	10
	150	78	Ø125	Ø90	Ø25	12

# Pump protecting cover

A simple cover to reduce the effect of the liquid and dust and protect the pump from accidental key operation.



### OD1-1 type

\* This installation picture is for illustrative purpose.

### ODN-2-F type

Pump is covered entirely by this cover.  
\* This installation picture is for illustrative purpose.

## Model identification

**ODN - 2 - F**  
①                      ②                      ③

### ① Series symbol

**ODL** .....Simple type  
**ODN** .....Standard type

### ② Pump symbol

**1** .....For EHN-B  
**2** .....For EHN-B-C  
**3** .....For EH-E

### ③ Size symbol

**None** .....As per the pump symbol(②)  
**F** .....Compatible with all sizes (EHN)

## Specifications

Model	Material		Applicable pump	Applicable tank
	Body	Others		
<b>ODL-1</b>	PC	Hook-and-loop fastener Polyester	EHN-B09・11・16・21・31	—
<b>ODN-1N</b> <sup>Note 1</sup>	PVC	Screw SUS	EHN-B09・11・16・21	CT-25・50・100N <sup>Note 2</sup>
<b>ODN-2-F</b> <sup>Note 1</sup>			EHN-B09・11・16・21 EHN-C16・21・31・36	
<b>ODN-3</b>			EH-E	

Note 1: Can be also installed on EHN-NAE with FCM. However, cannot be installed on pumps with FCP or DG.

Note 2: When using ODN-2-F in combination with CT-100, a dedicated mount for EHN is required.

### Purpose of use

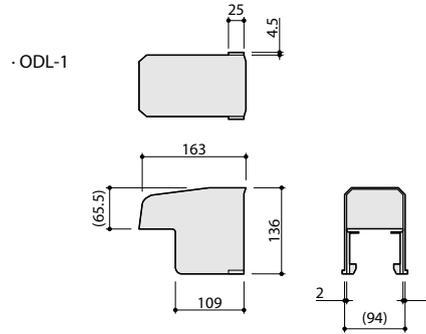
Pump protection

### Applicable pump models

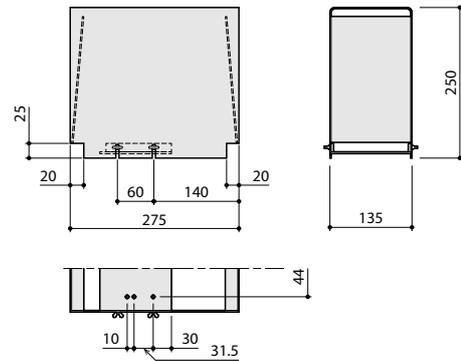
EHN

EH-E

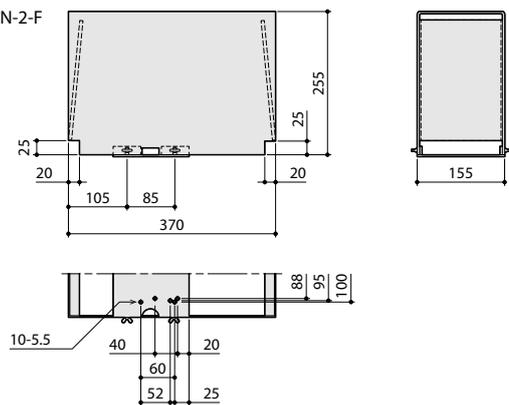
### Dimensions (mm)



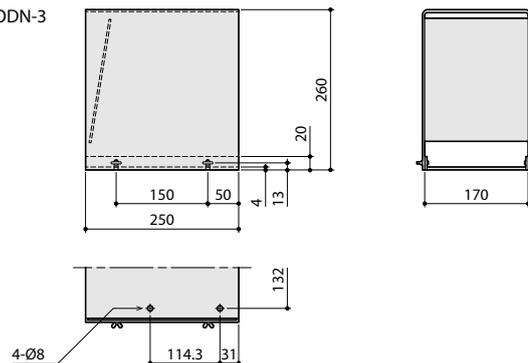
### · ODN-1N



### · ODN-2-F



### · ODN-3



# EHN mount

This special mount is used to elevate the pump when it is difficult to connect the suction side piping.



**EHN-B-M type made of SUS**

\* This installation picture is for illustrative purpose.

Purpose of use

Pump mount

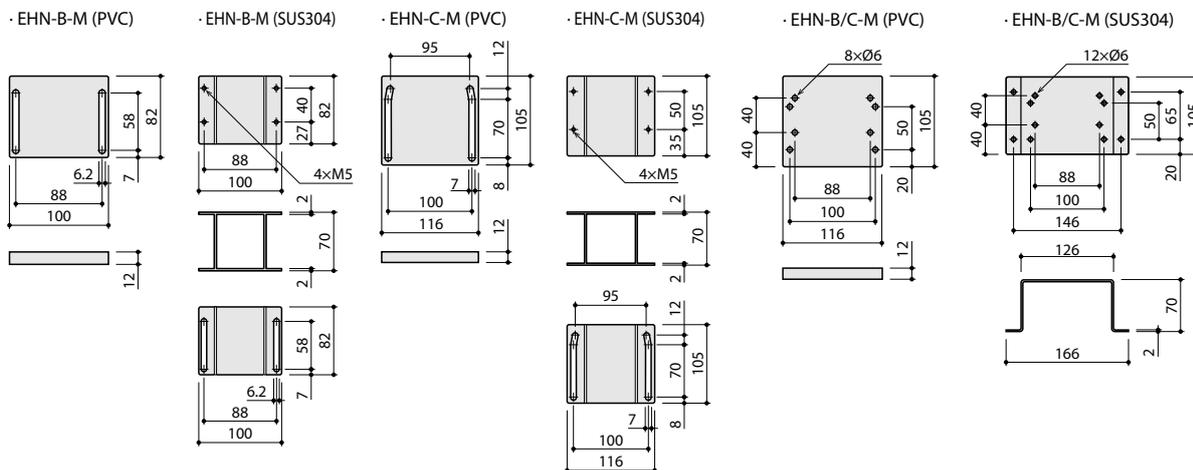
Applicable pump models

EHN

## Specifications

Model	Material	Application	Height	Applicable pump
EHN-B-M	PVC	For replacing existing installation	12 mm	EHN-B
	SUS304		70 mm	
EHN-C-M	PVC		12 mm	EHN-C
	SUS304		70 mm	
EHN-B/C-M	PVC	For new installation	12 mm	EHN-B/C common
	SUS304		70 mm	

### Dimensions (mm)



# Hose

Used for piping.



Purpose of use

Piping

Applicable pump models

EHN

EH-E

EWN

Name	Length	Connection	Wet-end material	Applicable pump
PVC blade hose	5 · 10 · 20 · 50 · 100 m	Ø4×Ø9	PVC	EHN/EWN-B11 · 16 · 21, C16 · 21
		Ø8×Ø13		EHN/EWN-B31, C31 · 36, EH-E31 · 36 · 46
Ø4×Ø9		EVA	EHN/EWN-B11 · 16 · 21, C16 · 21	
Ø8×Ø13			EHN/EWN-B31, C31 · 36, EH-E31 · 36 · 46	
EVA hose		Ø4×Ø6	PE	EHN/EWN-B11 · 16 · 21, C16 · 21
PE hose				Ø9×Ø12
Nylon hose	Ø4×Ø6	Nylon	EHN/EWN-B11 · 16 · 21, C16 · 21	
			Ø9×Ø12	EHN/EWN-B31, C31 · 36, EH-E
PTFE hose	5 · 10 · 20 · 50 · 100 m	Ø4×Ø6	PTFE	EHN/EWN-B11 · 16 · 21, C16 · 21
	10 · 20 m	Ø9×Ø12		EHN/EWN-B31, C31 · 36, EH-E
	10 m	Ø10×Ø12		EH-E
Multi-ultra hose	5 · 10 · 20 · 50 m	Ø4×Ø9	ETFE	EHN/EWN-B11 · 16 · 21, C16 · 21
		Ø8×Ø13.5		EHN/EWN-B31, C31 · 36, EH-E31 · 36 · 46

# Chemical tank CT-U N type

Made of polyethylene and the pump can be placed below. Does not cause gas lock easily and suitable for chemicals such as sodium hypochlorite and hydrazine which generate decomposition gas.

Purpose of use

Tank for chemical injection

Applicable pump models

EHN

EWN



CT-U25NR

CT-U50VR/ER

CT-U120VR/ER

Options



Cap



Drain valve set (CT-U50/120VR/ER only)



Mounting kit for installing EHN-B pumps (CT-U120VR/ER only)



Controller mounting plate (CT-U120VR/ER only)

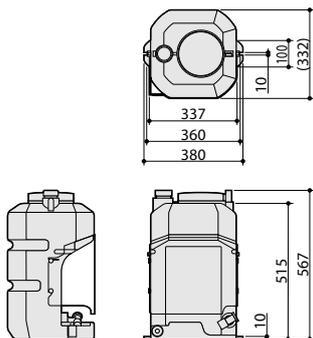
## Specifications

Model	Hose connection	Capacity L	Material		Level gauge	Applicable pump
			Body	O-ring		
CT-U25NR-1 <sup>Note 4</sup>	Ø4×Ø9	25	PE	FKM	None	EHN-B09・11・16・21 EWN-B11・16・21, C16・21 <sup>Note 4</sup>
CT-U25NR-4	Ø8×Ø13					EHN-B31
CT-U50VR-1M	Ø4×Ø9			EHN-B11・16・21, C16・21		
CT-U50VR-2M <sup>Note 1</sup>	Ø4×Ø6					
CT-U50VR-4M <sup>Note 2</sup>	Ø8×Ø13	EHN-B31, C31・36				
CT-U50ER-1M	Ø4×Ø9	EHN-B11・16・21, C16・21				
CT-U50ER-2M <sup>Note 1</sup>	Ø4×Ø6					
CT-U50ER-4M <sup>Note 3</sup>	Ø8×Ø13	EHN-B31, C31・36				
CT-U120VR-1M	Ø4×Ø9	120		FKM	Yes	EHN-B11・16・21, C16・21 EWN-B11・16・21, C16・21
CT-U120VR-2M <sup>Note 1</sup>	Ø4×Ø6					EHN-B31, C31・36 EWN-B31, C31・36
CT-U120VR-4M <sup>Note 2</sup>	Ø8×Ø13		EHN-B11・16・21, C16・21 EWN-B11・16・21, C16・21			
CT-U120ER-1M	Ø4×Ø9		EHN-B31, C31・36 EWN-B31, C31・36			
CT-U120ER-2M <sup>Note 1</sup>	Ø4×Ø6		EHN-B11・16・21, C16・21 EWN-B11・16・21, C16・21			
CT-U120ER-4M <sup>Note 3</sup>	Ø8×Ø13		EHN-B31, C31・36 EWN-B31, C31・36			

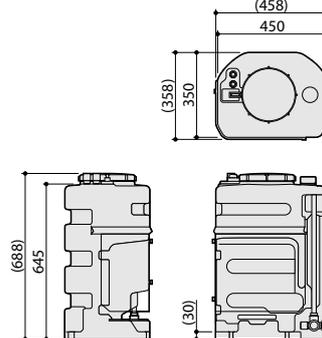
Note 1: CT-U hose set Ø4×Ø6 attached  
 Note 2: CT-U hose set Ø8×Ø13VR attached  
 Note 3: CT-U hose set Ø8×Ø13ER attached  
 Note 4: Please contact us if you install the EWN series, for the dedicated base is required.

Dimensions (mm)

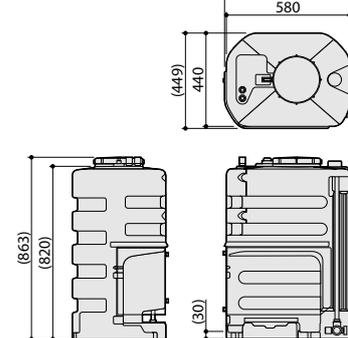
CT-U25NR



CT-U50VR/ER



CT-U120VR/ER



# Chemical tank CT type

Purpose of use  
Tank for chemical injection

Applicable pump models  
EHN

Round tank made of polyethylene. It comes with pump mounting nuts and a suction piping unit to facilitate pump installation. The piping unit includes a strainer.

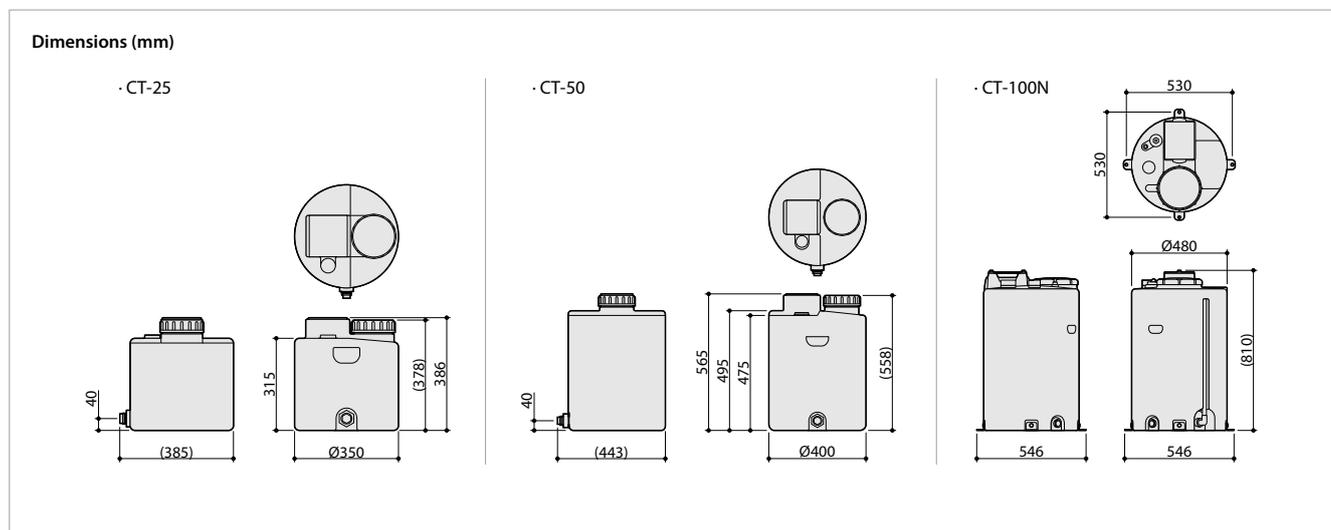


## Specifications

Model	Hose connection	Capacity L	Material		Level gauge	Applicable pump
			Body	Rubber		
CT-25 <sup>Note 1</sup>	Ø4×Ø9	25	PE	FEPM	None	EHN-B11・16・21, C16・21
CT-50A <sup>Note 1</sup>		50				
CT-50B <sup>Note 1</sup>	Ø8×Ø13	100				
CT-100N-1M <sup>Note 2</sup>	Ø4×Ø9				Yes	EHN-B11・16・21, C16・21
CT-100N-4M <sup>Note 2</sup>	Ø8×Ø13	EHN-B31, C31・36				

Note 1: The drain thread size of the CT-25, CT-50A, CT50B is G3/4.

Note 2: The CT-100N comes with an anchor base as standard. A tank drain valve set is available as an option.



- Overfeeding Prevention
- Siphon Prevention
- Chemical Solution Backflow Prevention
- Overpressure Prevention
- Pulsation Damping
- Piping Vibration Damping
- Flow Proportional Control
- Discharge Check
- Pressure Check
- Gas Lock Prevention
- Piping Connection
- Contamination Prevention
- Tank for Chemical Injection

# Multi-tank MT-N type

Made of polyethylene tank and has excellent resistance to impact and chemicals. Options such as electrode base, agitator base and anchor base can be mounted.



Purpose of use

Tank for chemical injection

Applicable pump models

EHN

EWN

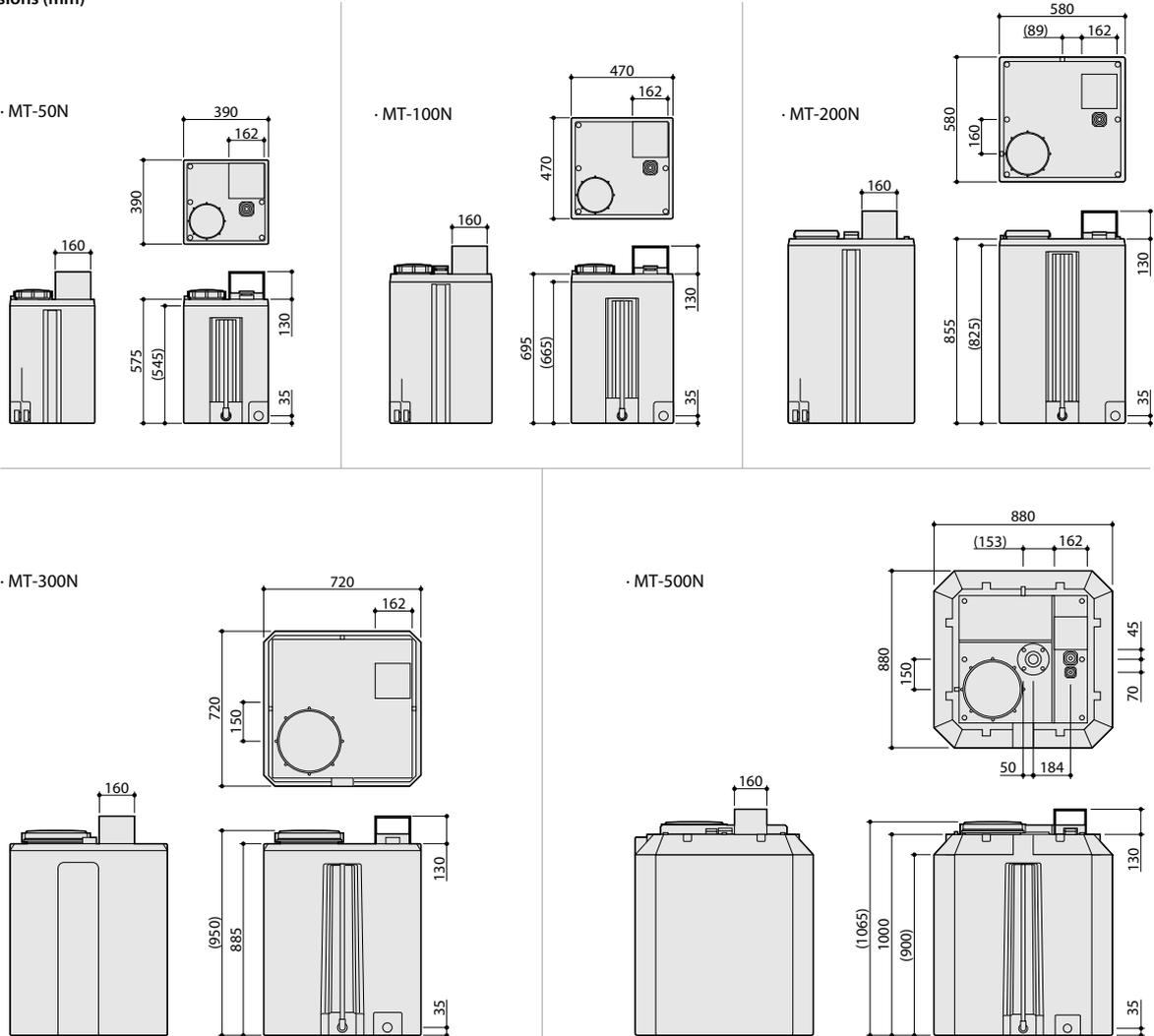
EH-E

## Specifications

Model	Hose connection	Capacity L	Material		Level gauge	Applicable pump
			Body	Rubber		
MT-50N		50	PE	EPDM/FKM	Yes	All models of electromagnetic metering pump
MT-100N	Ø4×Ø9	100				
MT-200N	Ø8×Ø13	200				
MT-300N	Ø4×Ø6	300				
MT-500N	Ø8×Ø13	500				

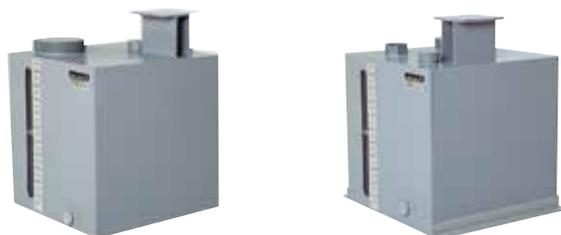
Standard accessories: Pump base, hand hole (with cap), drain, level gauge, pump suction port (with guide)

### Dimensions (mm)



## CTV, CTS type chemical tank made of PVC

A highly versatile square tank made of PVC, designed to have a pump placed on top. With a focus on durability, the bottom plate is welded both inside and outside, the top plate is made of an impact resistant PVC. Options such as agitator base and anchor base can be mounted on the CTS type.



CTV type

CTS type

Purpose of use

Tank for chemical injection

Applicable pump models

EHN

### Specifications

Model	Capacity L	Material		Level gauge	Applicable pump
		Body	Rubber		
CTV-50	50	PVC	FKM	Yes	All EHN models
CTV-100	100				
CTV-200	200				
CTV-300	300				
CTS-50	50				
CTS-100	100				
CTS-200	200				
CTS-300	300				
CTS-500	500				

Standard accessories: Liquid level gauge, pump mounting base, suction port (with suction guide), chemical feeding port (with lid), drain  
Options (CTS type): Agitator base, anchor base, protective tube, air vent, nozzle, electrode base  
\* Customizable according to your requests. Please contact us for details.

## CTS-N type chemical tank made of PVC

A highly versatile square tank made of PVC, designed to have a pump placed below. 1 or 2 pumps can be installed to the standard type.



Purpose of use

Tank for chemical injection

Applicable pump models

EHN

### Specifications

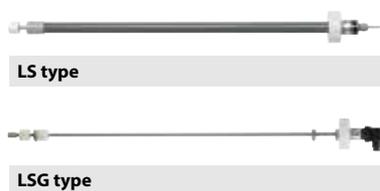
Model	Capacity L	Material		Level gauge	Applicable pump
		Body	Rubber		
CTS-50N	50	PVC	FKM	Yes	All EHN models
CTS-100N	100				
CTS-200N	200				
CTS-300N	300				
CTS-500N	500				

Standard accessories: Liquid level gauge, pump base, chemical feeding port (with lid), liquid outlet valve, liquid return port, drain

Standard pump: EHN-B11VC1R-55, EHN-B21VC1R-55 (high compression head)  
\* Customizable according to your requests. Please contact us for details.

## Level sensor for tank

Checks the level of chemical solution in the tank.



LS type

LSG type

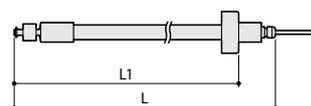
Purpose of use

Tank level check

Applicable tank model

CT-U

Dimensions (mm)



Model	L	L1
LS-15V	(530)	(475)
LS-050V	(655)	(600)
LS-120V	(845)	(790)

Please contact us for the external dimensions of the LSG type.

### Specifications

Model	Material				Electrical specifications	Applicable tank
	Support tube	Float	Stem	Stopper		
LS-15V	PVC	PP	PVC	PP	Max. operated capacity: 10 VA Max. operated current: 0.5 A Max. operated voltage: AC 125 V Contact resistance: 250 mΩ	For CT-U25NR
LS-050V						For CT-U50ER/VR, CT-U100N
LS-120V						For CT-U120ER/VR
LSG-15VH/VL	PVC	PP	PVC	PP	Max. operated capacity: 10 VA Max. operated current: 1.0 A Max. operated voltage: AC 100 V	For CT-U25NR, ETU-25NR
LSG-50VH/VL						CT-U50ER/VR, ETU-50VR, CT-100N
LSG-120VH/VL						CT-U120ER/VR, ETU-120VR

## Other options

### Options for EWN, IX series



- ❶ External control signal cable (DIN x connector)  
For EXT operation terminal (5 m)
- ❷ STOP signal cable (DIN x connector)  
For STOP terminal and AUX terminal (5 m)
- ❸ Output signal cable (DIN x connector)  
For output terminal (5 m)
- ❹ Profibus converter (for IX series only)  
For profibus communication

### Various controllers

#### pH/ORP · conductivity controller W/P100

An economical water treatment controller equipped with Japanese language display and excellent operability. With a selection of 8 control settings to choose from, it allows you to achieve a level of control that matches your application.

- Rich control settings
  - ON/OFF control (forward/reverse direction)
  - 2-point setting control (In-range or out-of-range activation)
  - Time proportional control (forward/reverse direction)
  - Pulse proportional control (forward/reverse direction)
- Flow control
- Synchronization/manual
- Interval control/timer control
- Sensor cleaning



P100



W100

#### pH/ORP · conductivity controller W600

Highly reliable and flexible with 6 control outputs, this water treatment controller can be used in many applications.

- Universal sensor input
- Dual analog (4 to 20 mA) input and output
- Multilingual support (including Japanese)
- Wall-mounted type for easy installation
- Data logging/trend graph function
- An extensive array of relay control functions with excellent flexibility



#### pH/ORP · conductivity controller W900

Resolves water treatment issues with excellent control. Water treatment controller with high reliability and flexibility.

- 8 control outputs for a wider range of applications
- Combined control is possible with virtual output
- Universal sensor input
- Multi-point analog (4 to 20 mA) input and output
- Multilingual support (including Japanese)
- Wall-mounted type for easy installation
- Data logging/trend graph function
- An extensive array of relay control functions with excellent flexibility



#### Multi-controller EUC-70P

- A variety of control functions including analog proportional control, counter control, dividing control with this one unit
- Negative LCD and backlight for improved visibility
- Multi-voltage to secure power supply at installation site
- Compact size with only 50% of the depth of conventional products



#### pH controller PH-50-R

- Calibration can be performed with a standard solution (of pH2 or 10) besides pH4, 7 and 9
- A wide range of temperature compensation
- Drip-proof structure (IP65)
- Security functions to prevent wrong operations, unauthorized operations etc.
- Multi-voltage type



#### Auto controller EA-61P

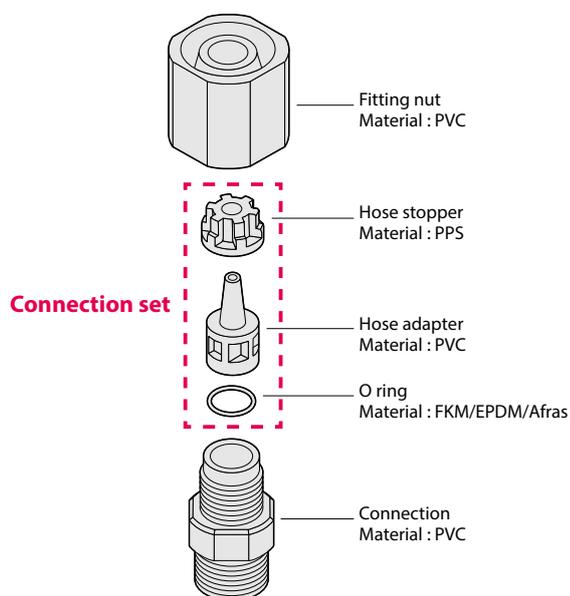
- Converts an analog input (DC 4 to 20 mA) into a pulse for proportional control of the stroke rate of electromagnetic metering pump
- Scaling function enables PID control/proportional control



## Connection diameter of multi-joint

The applicable hose diameter can be switched by removing the fitting nut and recombining the hose stopper and hose adapter.

In addition, a hose stopper, hose adapter, and O-ring are available as a connection set. Please see the chart on the right for details.



## Multi-fitting connection set

	Model code	Size
Connection set O ring material : FKM	VC1M	Ø4×Ø9
	VC2M	Ø4×Ø6
	VC3M	Ø6×Ø8
	VC4M	Ø8×Ø13 (13.5)
	VC5M	Ø9×Ø12
	VC6M	Ø10×Ø12
	VC7M	Ø1/4"×Ø3/8"
	VC8M	Ø3/8"×Ø1/2"
	VC18M	Ø6×Ø11
	VC23M	Ø6×Ø12
Connection set O ring material : EPDM	VC24M	Ø5×Ø8
	VH1M	Ø4×Ø9
	VH2M	Ø4×Ø6
	VH3M	Ø6×Ø8
	VH4M	Ø8×Ø13 (13.5)
	VH5M	Ø9×Ø12
	VH6M	Ø10×Ø12
	VH7M	Ø1/4"×Ø3/8"
Connection set O ring material : Afras	VH8M	Ø3/8"×Ø1/2"
	VH18M	Ø6×Ø11
	VH23M	Ø6×Ø12
	VH24M	Ø5×Ø8
	VA1M	Ø4×Ø9
	VA2M	Ø4×Ø6
	VA3M	Ø6×Ø8
	VA4M	Ø8×Ø13 (13.5)
Connection set O ring material : Afras	VA5M	Ø9×Ø12
	VA6M	Ø10×Ø12
	VA7M	Ø1/4"×Ø3/8"
	VA8M	Ø3/8"×Ø1/2"
	VA18M	Ø6×Ø11
	VA23M	Ø6×Ø12
	VA24M	Ø5×Ø8

## Electromagnetic metering pump / Metering pump

### Electromagnetic metering pump



EHN

EH-E

#### Specifications

Model	EHN	EWN	EH-E
Max. discharge capacity (mL/min)	450	420	1,250
Max. discharge pressure (MPa)	1.0	1.0	1.0
Wet-end main material	PVC	PVC	PVC
Handling liquid temperature (°C)	0-40	0-40	0-40

Specification is the value of the main material. There are also other material variations.

### Metering pump



IX

L

#### Specifications (50/60 Hz)

Model	L	TD	IX	AX
Max. discharge capacity (L/min)	45/54	8.5	5.0	51.6/49.7
Max. discharge pressure (MPa)	1.0	1.0	1.7	1.0
Wet-end main material	PVC	PVC	PVDF	PVC
Handling liquid temperature (°C)	0-50	0-40	0-50	0-50

Specification is the value of the main material. There are also other material variations.

## IWAKI Worldwide Network

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European office : IWAKI Europe GmbH	TEL: (49)2154 9254 0	FAX: 2154 9254 48
Germany : IWAKI Europe GmbH	TEL: (49)2154 9254 50	FAX: 2154 9254 55
Holland : IWAKI Europe GmbH (Netherlands Branch)	TEL: (31)74 2420011	FAX: (49)2154 925448
Italy : IWAKI Europe GmbH (Italy Branch)	TEL: (39)0444 371115	FAX: 0444 335350
Spain : IWAKI Europe GmbH (Spain Branch)	TEL: (34)93 37 70 198	FAX: 93 47 40 991
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Argentina : IWAKI America Inc. (Argentina Branch)	TEL: (54)11 4745 4116	
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Singapore : IWAKI Singapore Pte Ltd.	TEL: (65)6316 2028	FAX: 6316 3221
Indonesia : IWAKI Singapore (Indonesia Office)	TEL: (62)21 6906606	FAX: 21 6906612
Malaysia : IWAKIm Sdn. Bhd.	TEL: (60)3 7803 8807	FAX: 3 7803 4800
Australia : IWAKI Pumps Australia Pty Ltd.	TEL: (61)2 9899 2411	FAX: 2 9899 2421
Hong Kong : IWAKI Pumps Co., Ltd.	TEL: (852)2607 1168	FAX: 2607 1000
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China : IWAKI Pumps (Shanghai) Co., Ltd.	TEL: (86)21 6272 7502	FAX: 21 6272 6929
Korea : IWAKI Korea Co.,Ltd.	TEL: (82)2 2630 4800	FAX: 2 2630 4801
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Thailand : IWAKI (Thailand) Co.,Ltd.	TEL: (66)2 322 2471	FAX: 2 322 2477
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## Manufacturing Locations

IWAKI's production system, namely quality assurance system



Saitama Plant



Miharu Plant

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### IWAKI CO., LTD.

6-6 Kanda-Sudacho 2-chome Chiyoda-ku Tokyo 101-8558 Japan  
TEL : (81)3 3254 2935 FAX : 3 3252 8892

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Before use of pump, read instruction manual carefully to use the product correctly.

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