



《Bellows Valve》

CVY *Series*

Y-Type Bellows valves



IHARA SCIENCE CORPORATION

Product Features

- High Cv and maximum flow capacity (using a Y-shape)
- High purity investment casting and forged stainless steel construction
- High sealing ability and long durability
- Suitable for high-purity gas, vacuum piping and chemical distribution systems

Specification

Nominal Size	3/4"	1"	15A	20A	25A	32A	40A
Cv(※)	11	12	11	12	13	34	34
Working Pressure	Vac.~1MPa (Option : Vac.~2MPa)						
Temperature	-10~+80°C						
End Connection	BW (Pipe welding) VTF (Metal gasket seal fittings)						

※ working pressure : Vac.~1MPa

Material of Main Components

	Part	Material
①	Body	SCS16A/SUS316L
②	Seat	PTFE/PCTFE
③	Bellows	SUS316L
④	Gasket	PTFE/PCTFE
⑤	Bonnet	SCS13A
⑥	Handwheel	Resin/A5056

Helium Leak Test

Material(②④)	Outboard Pressure Test	Across the Seat
PTFE	$1 \times 10^{-6} \text{ Pa} \cdot \text{m}^3/\text{s}$ ($1 \times 10^{-5} \text{ scc/s}$)	$1 \times 10^{-6} \text{ Pa} \cdot \text{m}^3/\text{s}$ ($1 \times 10^{-5} \text{ scc/s}$)
	$5 \times 10^{-10} \text{ Pa} \cdot \text{m}^3/\text{s}$ ($5 \times 10^{-9} \text{ scc/s}$)	$5 \times 10^{-10} \text{ Pa} \cdot \text{m}^3/\text{s}$ ($5 \times 10^{-9} \text{ scc/s}$)

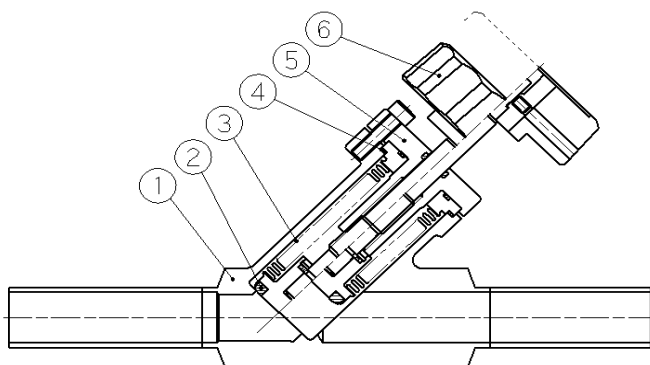
※ Tested in a vacuum process

※ Excluding permeation of PTFE/PCTFE

Construction

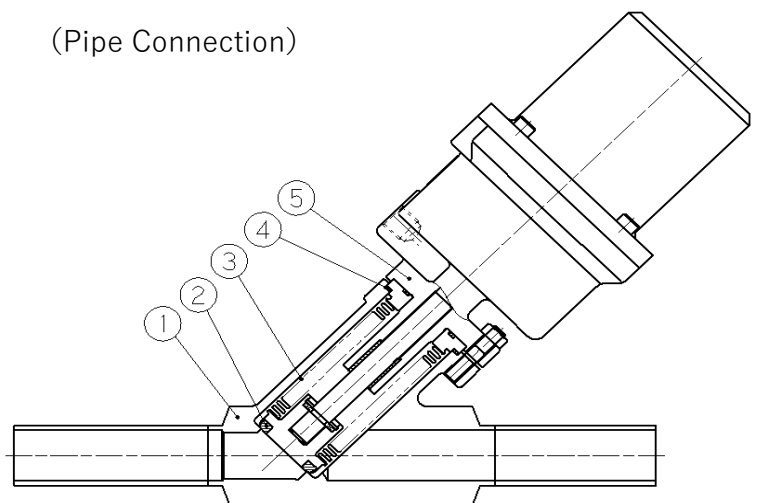
Manual Type Construction

(Pipe Connection)



Air-Operated (Normal Close) Construction

(Pipe Connection)



Order Information

Casting Body

CVY - ① ② ③ - 16 ④ - ⑤ - ⑥

Sample: CVY-20PW5-16CT-(blank)-EP

Forged Body

CVY - F - ① ② ③ - 6L ④ - ⑤ - ⑥

Sample: CVY-F-16VF(blank)-6LCT-NC-EP

①	
Mark	Size
12	3/4"
16	1"
15	15A
20	20A
25	25A
32	32A
40	40A

②		③	
Mark	Valve Connection	Mark	Thickness
TW	Tube	1.24	1.24mm
		1.65	1.65mm
PW	Pipe	5	Sch.5S
		10	Sch.10S
VM	VT (Male)	(blank)	-
VF	VTF(Female)	(blank)	-

※VM/VF Connection: Up to 1"

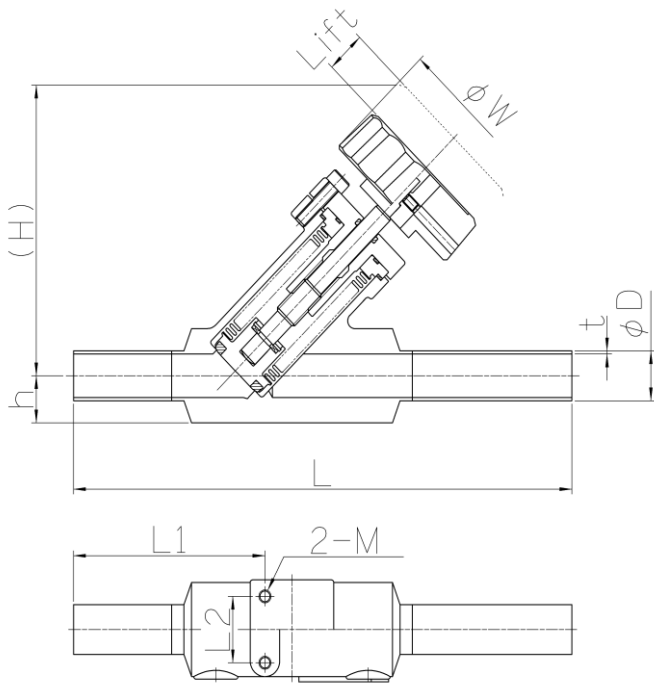
④		
Mark	Gasket	Seat
T	PTFE	PTFE
CT	PCTFE	PTFE
C	PCTFE	PCTFE

⑤	
Mark	Operation
(blank)	Manual
NC	Air-operated(Normal Close)

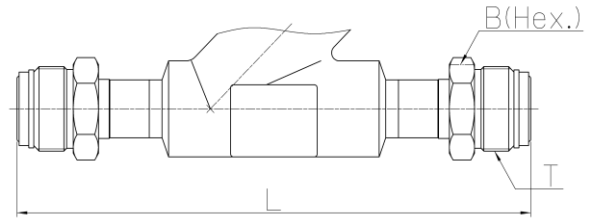
⑥	
Mark	Surface finish
EP	Electro Polished (Ra<0.18 μm)
BA	Bright Annealed (Ra<0.8 μm)

■ Dimensions

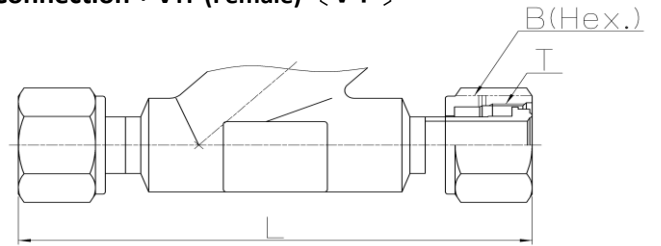
■ Connection : Pipe [PW]



■ Connection : VTF (Male) [VM]



■ Connection : VTF (Female) [VF]



■ Manual

TW

P/N	Size	L	L1	L2	H	h	D	t		M	W	Lift
CVY-12TW	3/4"	203	78	25.4	111	18	19.05	1.24	1.65	M5	62	16
CVY-16TW	1"	234	88	25.4	111	18	25.4	1.65		M5	62	16
CVY-24TW	1 1/2"	246	100	25.4	111	18	38.1	1.65		M5	62	16
CVY-32TW	2"	335.5	129	44.5	172.8	26	50.8	1.65		M6	100	24

PW

P/N	Size	L	L1	L2	H	h	D	t		M	W	Lift
CVY-15PW	15A	239	124	25.4	111	18	21.7	1.65	2.1	M5	62	16
CVY-20PW	20A	239	124	25.4	111	18	27.2	1.65	2.1	M5	62	16
CVY-25PW	25A	239	124	25.4	111	18	34	1.65	2.8	M5	62	16
CVY-32PW	32A	335.5	129	44.5	172.8	26	42.7	1.65	2.8	M6	100	24
CVY-40PW	40A	335.5	129	44.5	172.8	26	48.6	1.65	2.8	M6	100	24

VTF(Male)

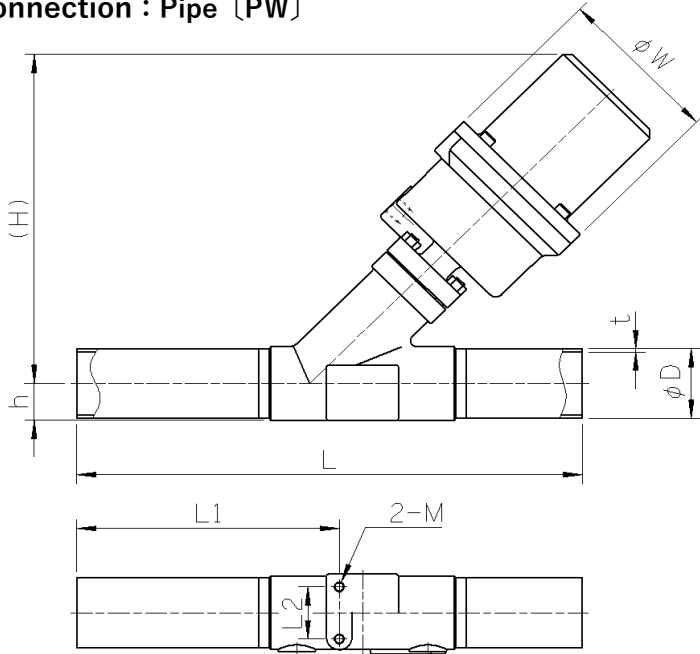
P/N	Size	L	L1	L2	H	h	B	T	M	W	Lift
CVY-12VM	3/4"	202	90	25.4	111	18	33.34	1 1/4-18UNEF	M5	62	16
CVY-16VM	1"	215.8	96.9	25.4	111	18	41.27	1 1/2-20UN	M5	62	16

VTF(Female)

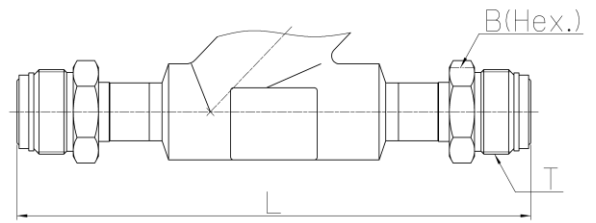
P/N	Size	L	L1	L2	H	h	B	T	M	W	Lift
CVY-12VF	3/4"	168	73	25.4	111	18	38.1	1 1/4-18UNEF	M5	62	16
CVY-16VF	1"	178	78	25.4	111	18	44.45	1 1/2-20UN	M5	62	16

■ Dimensions

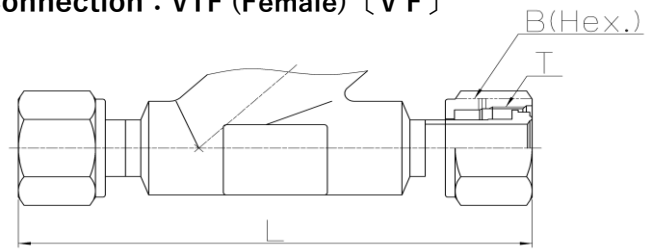
■ Connection : Pipe (PW)



■ Connection : VTF (Male) (VM)



■ Connection : VTF (Female) (VF)



■ Air-Operated (Normal Close)

TW											
P/N	Size	L	L1	L2	H	h	D	t		M	W
CVY-12TW-NC	3/4"	203	78	25.4	161	18	19.05	1.24	1.65	M5	78
CVY-16TW-NC	1"	234	88	25.4	161	18	25.4	1.65		M5	78
CVY-24TW-NC	1 1/2"	246	100	25.4	161	18	38.1	1.65		M5	78
CVY-32TW-NC	2"	335.5	129	44.5	266.6	26	50.8	1.65		M6	148

PW											
P/N	Size	L	L1	L2	H	h	D	t		M	W
CVY-15PW-NC	15A	239	124	25.4	161	18	21.7	1.65	2.1	M5	78
CVY-20PW-NC	20A	239	124	25.4	161	18	27.2	1.65	2.1	M5	78
CVY-25PW-NC	25A	239	124	25.4	161	18	34	1.65	2.8	M5	78
CVY-32PW-NC	32A	335.5	129	44.5	266.6	26	42.7	1.65	2.8	M6	148
CVY-40PW-NC	40A	335.5	129	44.5	266.6	26	48.6	1.65	2.8	M6	148

VTF(Male)											
P/N	Size	L	L1	L2	H	h	B	T		M	W
CVY-12VM-NC	3/4"	202	90	25.4	161	18	33.34	1 1/4-18UNEF		M5	78
CVY-16VM-NC	1"	215.8	96.9	25.4	161	18	41.27	1 1/2-20UN		M5	78

VTF(Female)											
P/N	Size	L	L1	L2	H	h	B	T		M	W
CVY-12VF-NC	3/4"	168	73	25.4	161	18	38.1	1 1/4-18UNEF		M5	78
CVY-16VF-NC	1"	178	78	25.4	161	18	44.45	1 1/2-20UN		M5	78



■ Stainless Steel Pipe Y-Type Bellows Valve
(size 40A to 300A)



Valve with Header
(High Flow Diaphragm Valve)



■ Bellows Valve



■ Diaphragm Valve



イハラサイエンス株式会社
IHARA SCIENCE CORPORATION

ISO 9001/ISO14001 Certified Plants (DNV certification)

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⚠ Warning

If you don't select and handle fittings, valves and related accessories in an adequate manner, it may injure human beings and damage applicable systems. Within the responsibility and authorization of users and piping designers, fittings, valves and related accessories shall be adequately selected, assembled, used and maintained based on the applicable conditions and product conformity to the system to be applied. Please read our operation manual carefully and feel free to contact us if you have any questions or requests.

WARRANTY CLAUSE

1. Warranty Period

The warranty period of the products is one (1) year from start of use or one and half (1.5) years after delivery, whichever comes earlier. However, the products with special specification and/or the cases used deviating from the design specification shall be exempted.

2. Scope of Warranty

For any failure and damage under maker's responsibility found during the warranty period, the substitutes and/or replacement parts shall be provided free of charge. The warranty shall not be applied to a claim for the liquidated damages.

■ URL <http://www.ihara-sc.co.jp/en/>

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