



## Back Flow Preventing Valve with Push-In Fitting Check Valve Series



- *Threaded port to push-in connect port type:  
comes with Nickel-plated body (small sizes) or Aluminum body (large sizes)  
\* Inexpensive models come with plastic body*
- *Threaded port to threaded port type:  
comes with Nickel-plated body (small sizes) or Aluminum body (large sizes)  
\* Inexpensive models also come with nickel-plated body but the poppet is made of POM*
- *In-Line - push-in connect to push-in connect union type:  
comes with Anodized aluminum body (small sizes) or Aluminum body (large sizes)  
\* Inexpensive models come with plastic body  
\* Low cracking Pressure type comes with plastic body (Diaphragm opening pressure: 0.73psi)  
\* Low cracking pressure PP type comes with translucent polypropylene body and the metal parts are made of SUS304 (Diaphragm opening pressure: 0.73psi)*

## Standard Size List

### Connection: Thread ⇔ Tube

- Metallic body



Type	Thread size	Tube O.D. (inch)				
		5/32	1/4	5/16	3/8	1/2
CVCI Straight NPT, UNF thread	10-32UNF	●				
	1/8NPT	●	●	●		
	1/4NPT		●	●	●	
	3/8NPT 1/2NPT				●	●

Type	Thread size	Tube O.D. (mm)				
		4	6	8	10	12
CVCI Straight Metric, R or BSPT thread	M5 × 0.8	●				
	M6 × 1	●				
	R1/8	●	●	●		
	R1/4		●	●	●	
	R3/8 R1/2				●	●

- Plastic main body



Type	Thread size	Tube O.D. (inch)		
		5/32	1/4	5/16
CVPCI Straight NPT, UNF thread	10-32UNF	●		
	1/8NPT	●	●	
	1/4NPT		●	●

Type	Thread size	Tube O.D. (mm)		
		4	6	8
CVPCI Straight Metric, R or BSPT thread	M5 × 0.8	●		
	M6 × 1	●		
	R1/8	●	●	●
	R1/4		●	●

### Connection: Tube ⇔ Tube (Equal dia.)



Type	Thread size	Tube O.D. (Inch)				
		5/32	1/4	5/16	3/8	1/2
CVLU In-Line Straight		●	●	●	●	●
CVLU In-Line Straight Low Cracking		●	●	●	●	●
PCVLU In-Line Straight PP + SUS304		●	●	●	●	●

Type	Thread size	Tube O.D. (mm)				
		4	6	8	10	12
CVLU Union Straight		●	●	●	●	●
CVLU In-Line Straight Low Cracking		●	●	●	●	●
PCVLU In-Line Straight PP + SUS304		●	●	●	●	●



### Connection: Tube ⇔ Tube (Unequal dia.)



Type	Tube O.D.1 (mm)	Tube O.D.2 (mm)
		10
CVCE Unequal Union Straight	12	●

### Connection: Male thread ⇔ Female thread

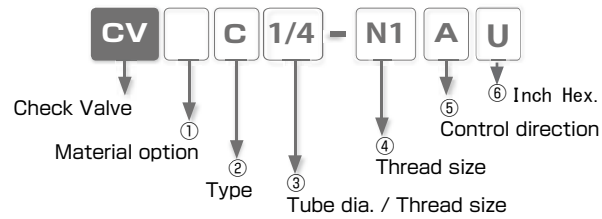


Type	Thread size	Thread size			
		1/8NPT	1/4NPT	3/8NPT	1/2NPT
CVFI Bush (NPT)		●	●	●	●
CVPI Bush (NPT)		●			

Type	Thread size	Thread size			
		R1/8	R1/4	R3/8	R1/2
CVFI Bush (R or BSPT)		●	●	●	●
CVPI Bush (R or BSPT)		●			



## Model Designation (Example)



### ① Material option

No code : Metal type

P : Resin type (Only available for CVC and CVU with tube dia. 4/6/8mm and CVF Rc1/8 and Rc1/4)

※ . Material of Bush type (CVPF) body is metal and Poppet is resin.

### ② Type

Code	Type	Code	Type	Code	Type	Code	Type
C	Straight	U	In-Line Straight	G	In-Line Reducer	F	Bush

### ③ Tube dia. / Thread size

Connection	Tube dia.					Taper pipe thread (Male)				
	Code	5/32	1/4	5/16	3/8	1/2	N1	N2	N3	N4
Size (inch)	5/32"	1/4"	5/16"	3/8"	1/2"	1/8NPT	1/4NPT	3/8NPT	1/2NPT	

Code	4	6	8	10	12	01	02	03	04
Size (mm)	ø4	ø6	ø8	ø10	ø12	R1/8	R1/4	R3/8	R1/2

※ R thread is same as BSPT

### ④ Thread size(※. Female threads are for CVF, CVPF types only)

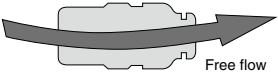
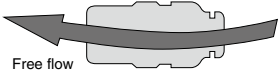
Connection	Tube dia.					UNF thread	Taper pipe thread (Male or Female)				
	Code	5/32	1/4	5/16	3/8		1/2	U10	N1	N2	N3
Size (inch)	5/32"	1/4"	5/16"	3/8"	1/2"	10-32UNF	1/8NPT	1/4NPT	3/8NPT	1/2NPT	

Metric

Code	4	6	8	10	12	M5	M6	01	02	03	04
Size (mm)	ø4	ø6	ø8	ø10	ø12	M5×0.8	M6×1	R1/8	R1/4	R3/8	R1/2
								Rc1/8	Rc1/4	Rc3/8	Rc1/2

※ R thread is same as BSPT

### ⑤ Control direction (※. No entry for In-line straight type "U")

Code	A	B
Control direction	Inlet on male thread	Outlet on male thread
		

### ⑥ Wrench Size

**U:** inch wrench spec. (NPT or UNF thread)

**No Code:** metric wrench spec. (metric thread)

## Specifications

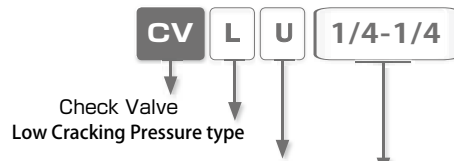
Fluid medium	Air
Operating pressure range	-29.5 inHg ~130psi (-0.1 ~ 0.9 MPa)
Opening pressure	1.45psi (0.01MPa)
Max. vacuum	-29.5 in. Hg (-100kPa)
Operating temp. range	32 ~ 140°F (0 ~ 60°C) (no freezing)

※ Opening pressure is the initial pressure on the secondary side when the pressure is applied from free flow side.



## In-Line Straight Low Cracking Pressure

RoHS compliant



① Tube dia.

Code	5/32-5/32	1/4-1/4	5/16-5/16	3/8-3/8	1/2-1/2	4 - 4	6 - 6	8 - 8	10-10	12-12
Tube dia.	5/32"	1/4"	5/16"	3/8"	1/2"	ø4mm	ø6mm	ø8mm	ø10mm	ø12mm

### Specifications

Fluid medium	Air
Operating pressure range	-29.5 inHg ~ 145psi (-0.1 ~ 1.0MPa)
Opening pressure	0.725psi (0.005MPa)
Min. opening differential pressure	1.45psi (0.01MPa)
Operating temp. range	32 ~ 140°F (0 ~ 60°C) (no freezing)

※ Opening pressure is the initial pressure on the secondary side when the pressure is applied from free flow side.

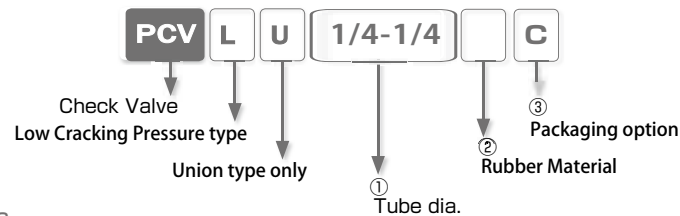
※ See the website of Low Cracking Pressure Check Valve as to the dimensions and details



## In-Line Straight Low Cracking Pressure PP series

(Polypropylene body + SUS304 metal parts for clean environment)

RoHS compliant



① Tube dia.

Code	5/32-5/32	1/4-1/4	5/16-5/16	3/8-3/8	1/2-1/2	4 - 4	6 - 6	8 - 8	10-10	12-12
Tube dia.	5/32"	1/4"	5/16"	3/8"	1/2"	ø4mm	ø6mm	ø8mm	ø10mm	ø12mm

② Rubber material

Code	No code	-F	-N
Material	EPDM	FKM	NBR

\*The material of the valve packing is FKM

③ Packaging option

-C: Clean-room package

No code: Standard package

### Specifications

Fluid medium	Air, Water, Other chemical (conditional)
Operating pressure range	-29.5 inHg ~ 145psi (-0.1 ~ 1.0MPa)
Opening pressure	0.725psi (0.005MPa)
Min. opening differential pressure	1.45psi (0.01MPa)
Operating temp. range	32 ~ 140°F (0 ~ 60°C) (no freezing)

※ Opening pressure is the initial pressure on the secondary side when the pressure is applied from free flow side.

※ See the website of SUS304 PP Water Use Check Valve as to the dimensions and details