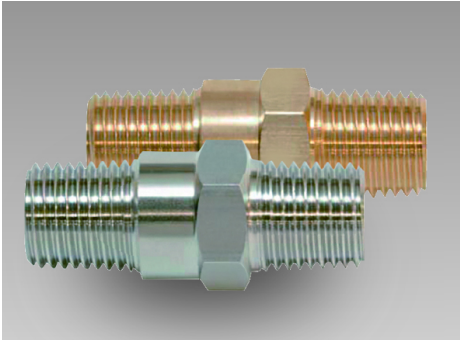


# Check Valves

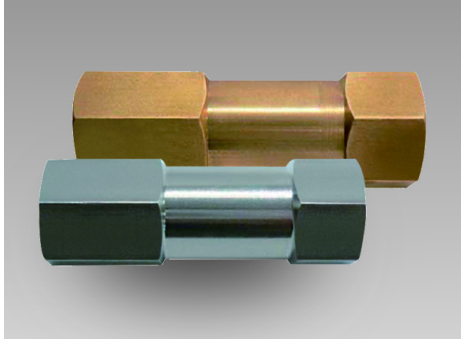
## FC series

Standard model(external thread type)  
Corresponds to compressed air and liquid.



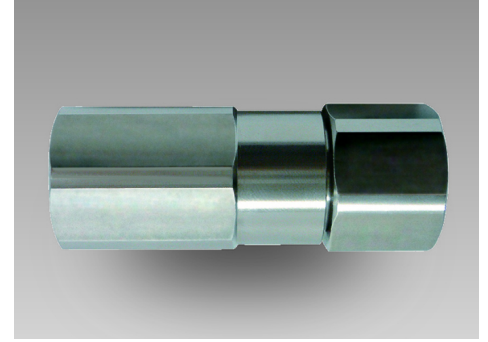
## FCF series

Standard model(Internal thread type)  
Corresponds to compressed air and liquid.



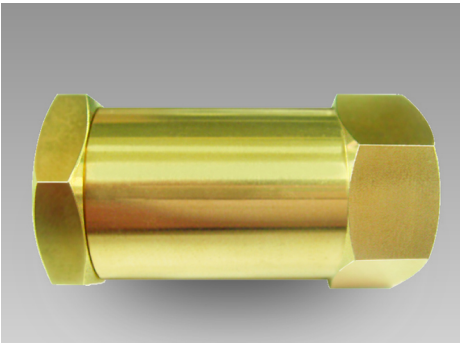
## FCH series

High pressure model.  
Corresponds to compressed air and liquid.



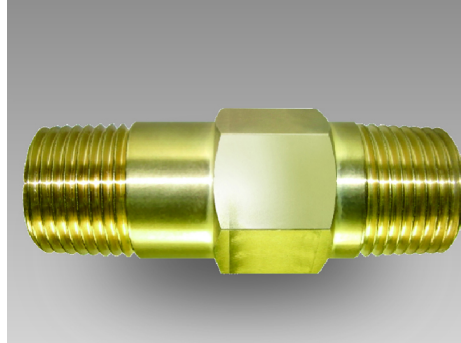
## FHVC series

High flow model.  
Corresponds to compressed air and liquid.



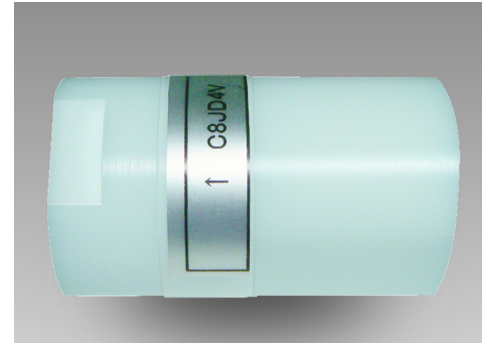
## FCAM series

Cracking pressure adjustment model.  
Corresponds to compressed air and liquid.



## FC8 series

We adopted resin POM for the body.  
Corresponds to compressed air and liquid.



## VC-P series

Low pressure / low pressure cracking type resin check valve.

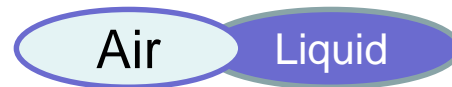
Corresponds to compressed air and liquid(water).





# FUJIKURA COMPOSITES

## “FC” series



Standard model(external thread type) Corresponds to compressed air and liquid..

### ■ Features

- Simple design makes low price.
- Damages to seal material were reduced by double-touch system (O-ring and metal-seal).
- Various port sizes and seal materials.



### ■ Applications

- Machine Tools : Milling machine, NC lathe, laser processing machine etc.
- Industrial furnace : General industrial furnace, heating furnace, vacuum furnace, etc.
- Medical : Endoscope washing device, oxygen concentrator, anesthesia machine etc.
- Analysis equipment: Measurement equipment, component gas analysis, gas analyzer etc.
- Battery : Household fuel cell, secondary battery, gas engine etc.
- Water (liquid) treatment: Pure water production, pure water recycling.
- Gas generator related: Compressor, compact pressure vessel, various gas generator etc.
- Others: Oxygen capsule, gasoline measuring instrument, forklift etc.

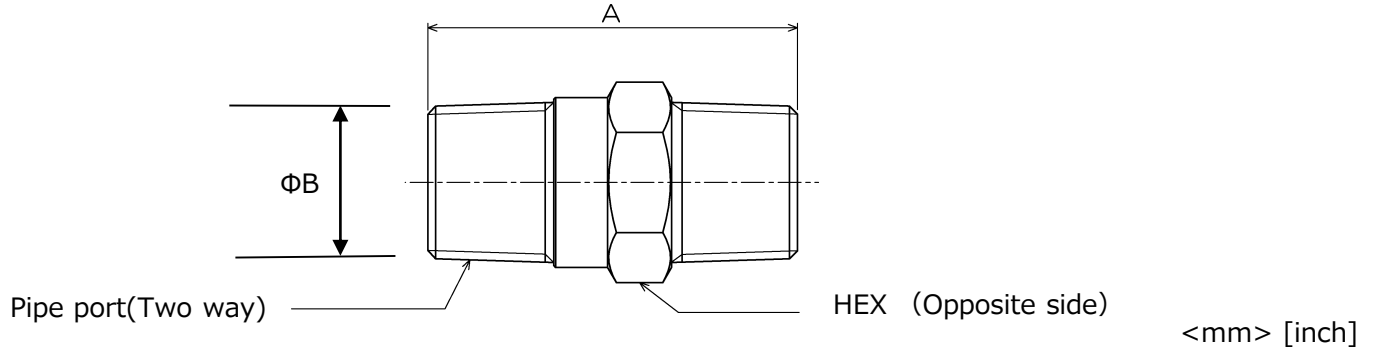
### ■ Specification

Operating Pressure MPa[psi]	Vacuum~4.9 [Vacuum ~710.69]	Material of body	Brass / SUS316
Pressure resistant MPa[psi]	7.35 [1066.03]	Material of seal	FKM (Standard)
Pipe port	Rc1/8~Rc1	Operating temperature	Pursuant to seal material
		Cracking pressure kPa[psi]	7 [1.02]
Comment	<ul style="list-style-type: none"> <li>■ Max differential pressure 0.6MPa [87.02psi] (Conditions: Releasing fluids from outlet).</li> <li>■ Option cracking pressure 1kPa, 20KPa,50KPa[0.15psi, 2.90psi, 7.25psi].</li> <li>*Outlet port's direction of 1kPa is upward.</li> <li>■ Disc filter is attachable for FC series only. If you need more details, contact us.</li> </ul>		



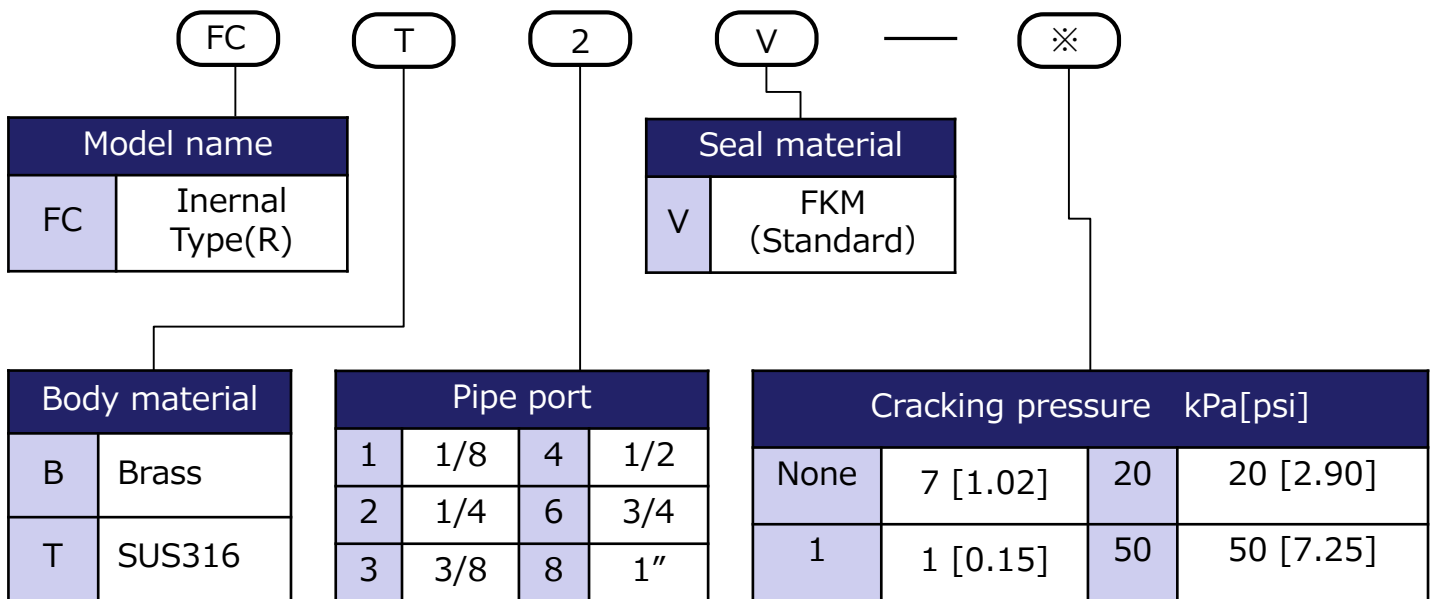
# FUJIKURA COMPOSITES

## Size



Pipe port(R)	A	B	HEX (Opposite side)	CV値 (Reference)
1/8	<33.5> [1.32]	<3.5> [0.14]	<13.0> [0.51]	<0.28>
1/4	<40.2> [1.58]	<5.0> [0.20]	<16.0> [0.63]	<0.60>
3/8	<40.5> [1.59]	<6.9> [0.27]	<19.0> [0.75]	<1.05>
1/2	<48.0> [1.89]	<9.8> [0.39]	<22.0> [0.87]	<1.60>
3/4	<59.0> [2.32]	<14.0> [0.55]	<29.0> [1.14]	<3.20>
1"	<68.0> [2.68]	<16.2> [0.64]	<35.0> [1.38]	<6.90>

## Model designation



※Please inquire about other materials.

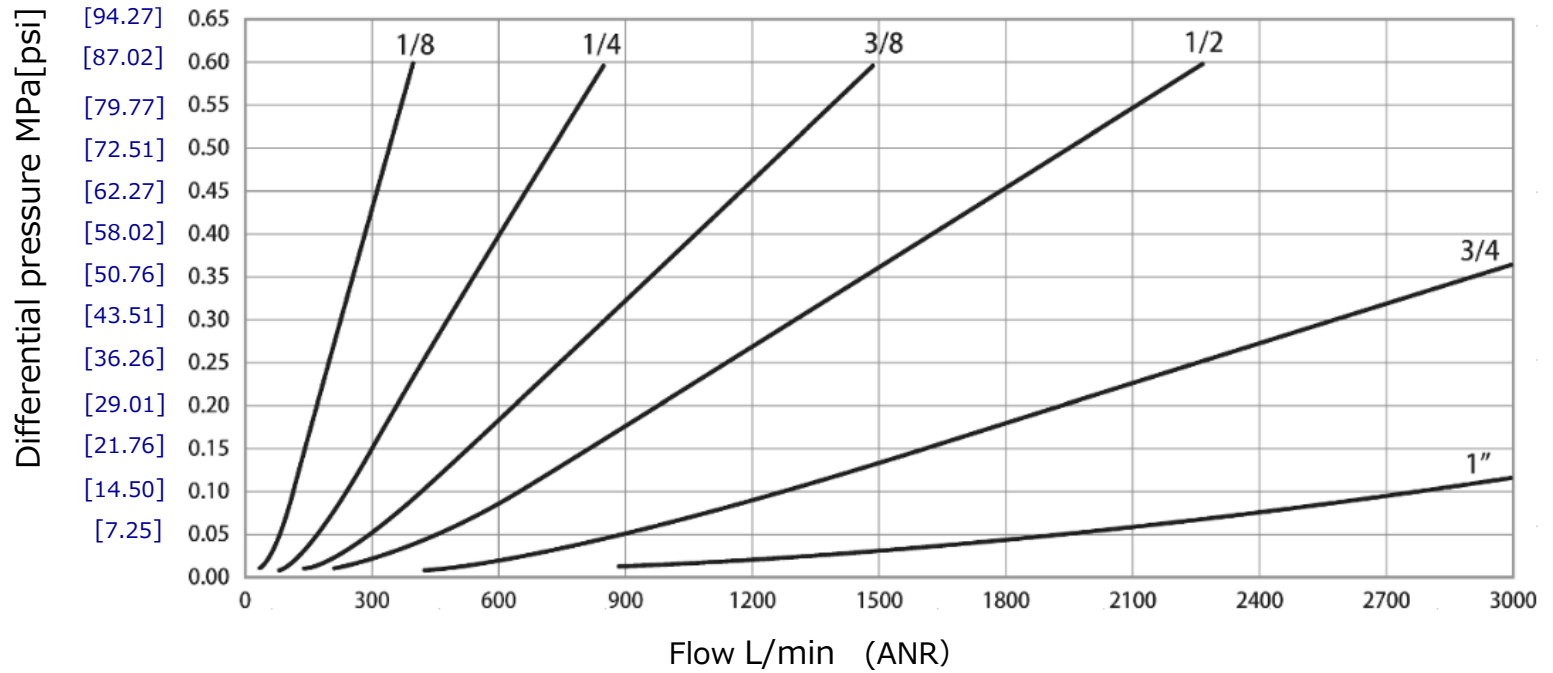
※When operating temperature ranges are more than 100°C[212°F] or less or -20°C[-4°F], contact us.



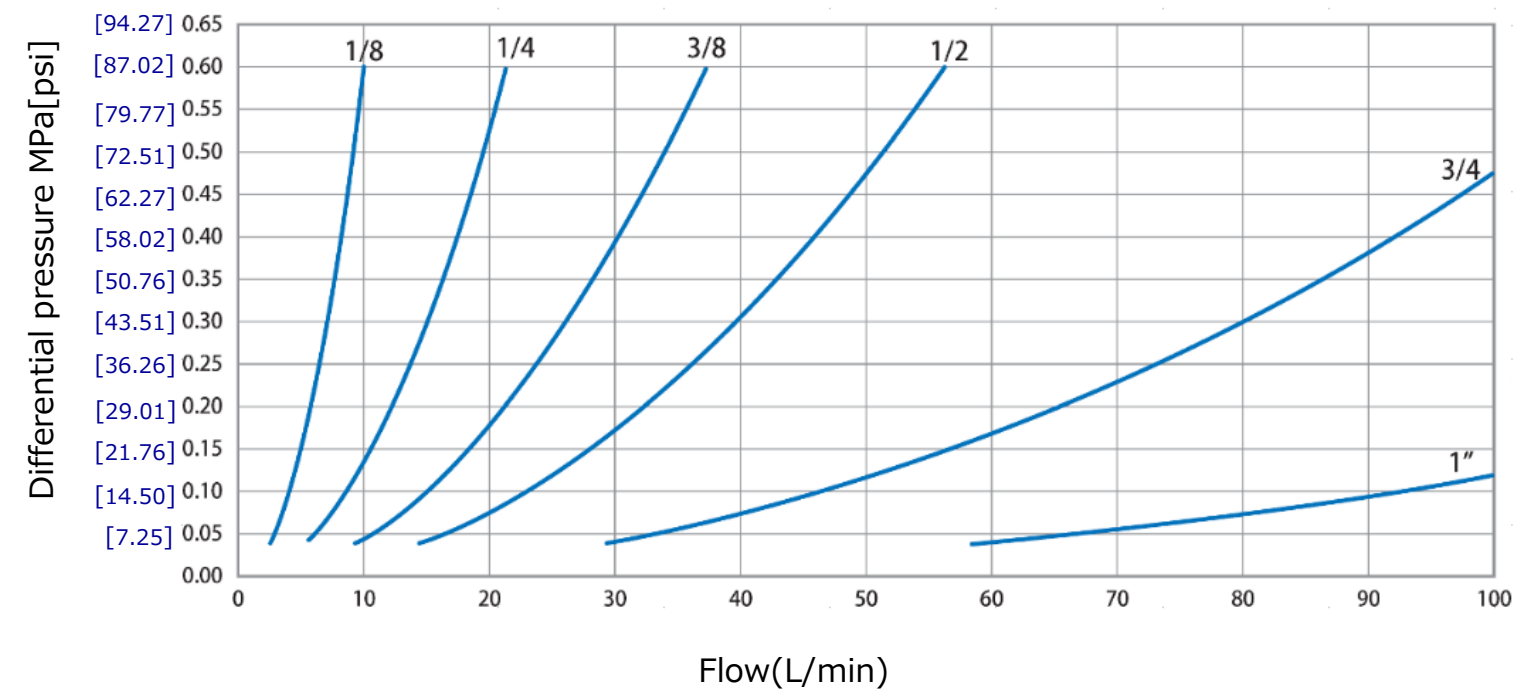
# FUJIKURA COMPOSITES

## Characteristic

### FLOW CHARACTERISTICS AIR (Reference)



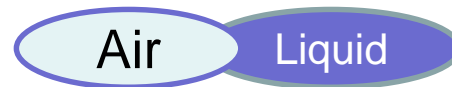
### FLOW CHARACTERISTICS WATER (Reference)





# FUJIKURA COMPOSITES

## “FCF” series



Standard model(external thread type) Corresponds to compressed air and liquid..

### ■ Features

- Simple design makes low price.
- Damages to seal material were reduced by double-touch system (O-ring and metal-seal).
- Various port sizes and seal materials.



### ■ Applications

- Machine Tools : Milling machine, NC lathe, laser processing machine etc.
- Industrial furnace : General industrial furnace, heating furnace, vacuum furnace, etc.
- Medical : Endoscope washing device, oxygen concentrator, anesthesia machine etc.
- Analysis equipment: Measurement equipment, component gas analysis, gas analyzer etc.
- Battery : Household fuel cell, secondary battery, gas engine etc.
- Water (liquid) treatment: Pure water production, pure water recycling.
- Gas generator related: Compressor, compact pressure vessel, various gas generator etc.
- Others: Oxygen capsule, gasoline measuring instrument, forklift etc.

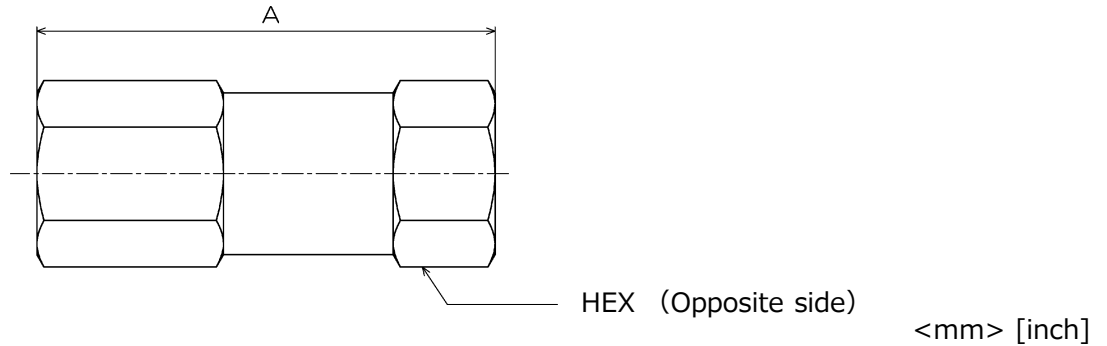
### ■ Specification

Operating Pressure MPa[psi]	Vacuum~4.9 [Vacuum ~710.69]	Material of body	Brass / SUS316
Pressure resistant MPa[psi]	7.35 [1066.03]	Material of seal	FKM (Standard)
Pipe port	Rc1/8~Rc1	Operating temperature	Pursuant to seal material
		Cracking pressure kPa[psi]	7 [1.02]
Comment	<ul style="list-style-type: none"> <li>■ Max differential pressure 0.6MPa [87.02psi] (Conditions: Releasing fluids from outlet).</li> <li>■ Option cracking pressure 1kPa, 20KPa,50KPa[0.15psi, 2.90psi, 7.25psi].</li> <li>*Outlet port's direction of 1kPa is upward.</li> <li>■ Disc filter is attachable for FC series only. If you need more details, contact us.</li> </ul>		



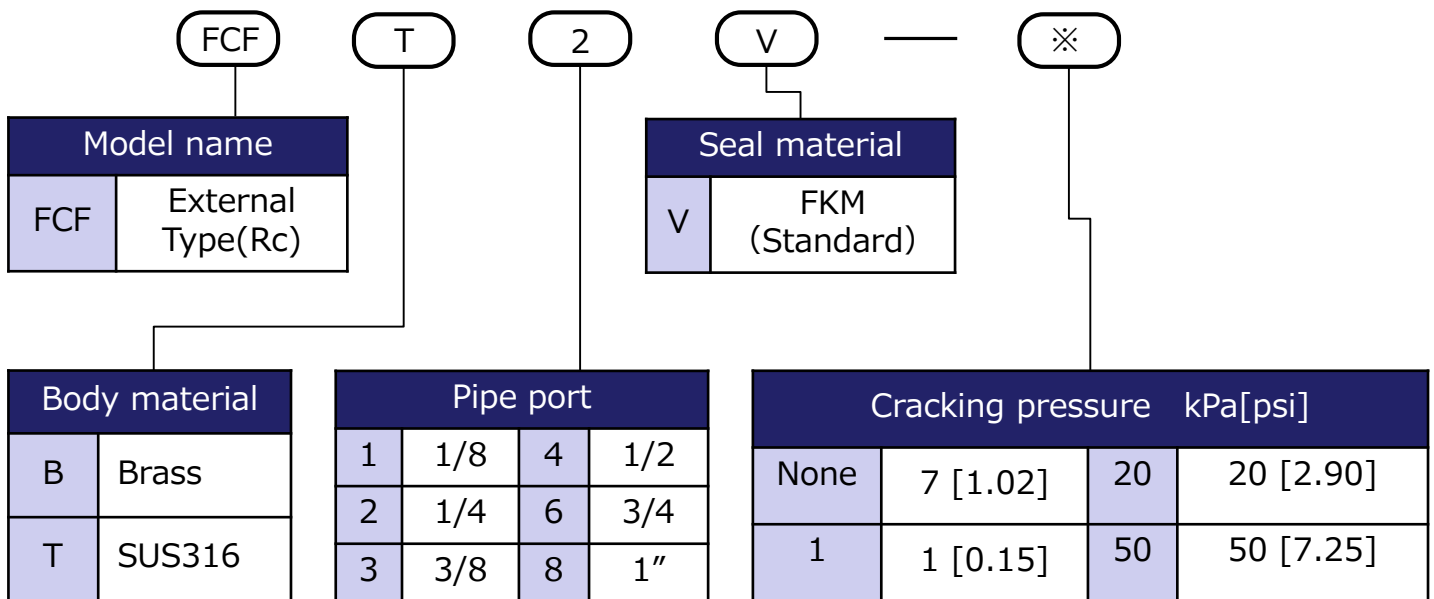
# FUJIKURA COMPOSITES

## ■ Size



Pipe port(R)	A	B	HEX (Opposite side)	CV (Reference)
1/8	<38.0> [1.50]	<3.5> [0.14]	<13.0> [0.51]	<0.28>
1/4	<52.0> [2.05]	<5.0> [0.20]	<17.0> [0.67]	<0.60>
3/8	<54.0> [2.13]	<6.9> [0.27]	<19.0> [0.75]	<1.05>
1/2	<64.0> [2.52]	<9.8> [0.39]	<22.0> [0.87]	<1.60>
3/4	<75.0> [2.95]	<14.0> [0.55]	<29.0> [1.14]	<3.20>
1"	<89.0> [3.50]	<16.2> [0.64]	<35.0> [1.38]	<6.90>

## ■ Model designation



※Please inquire about other materials.

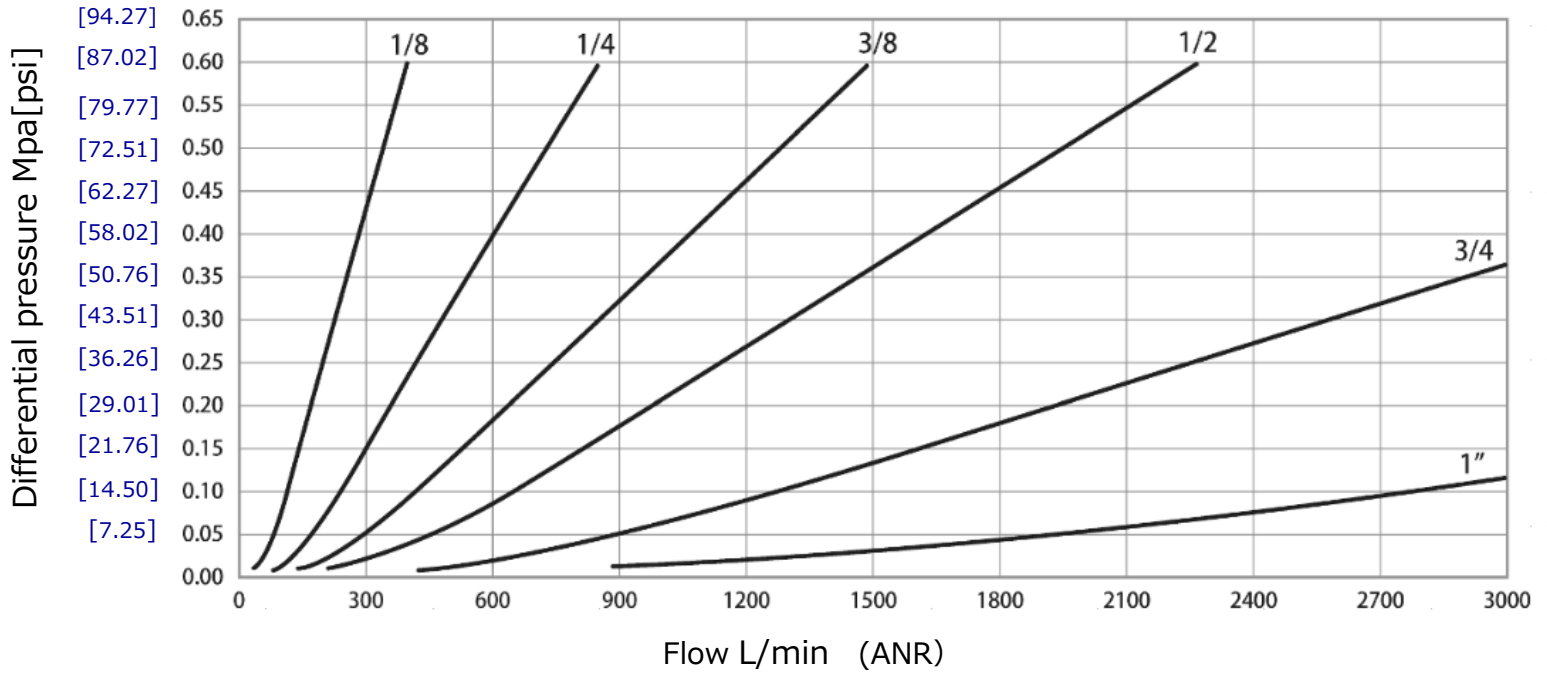
※When operating temperature ranges are more than 100°C[212°F] or less or -20°C[-4°F], contact us.



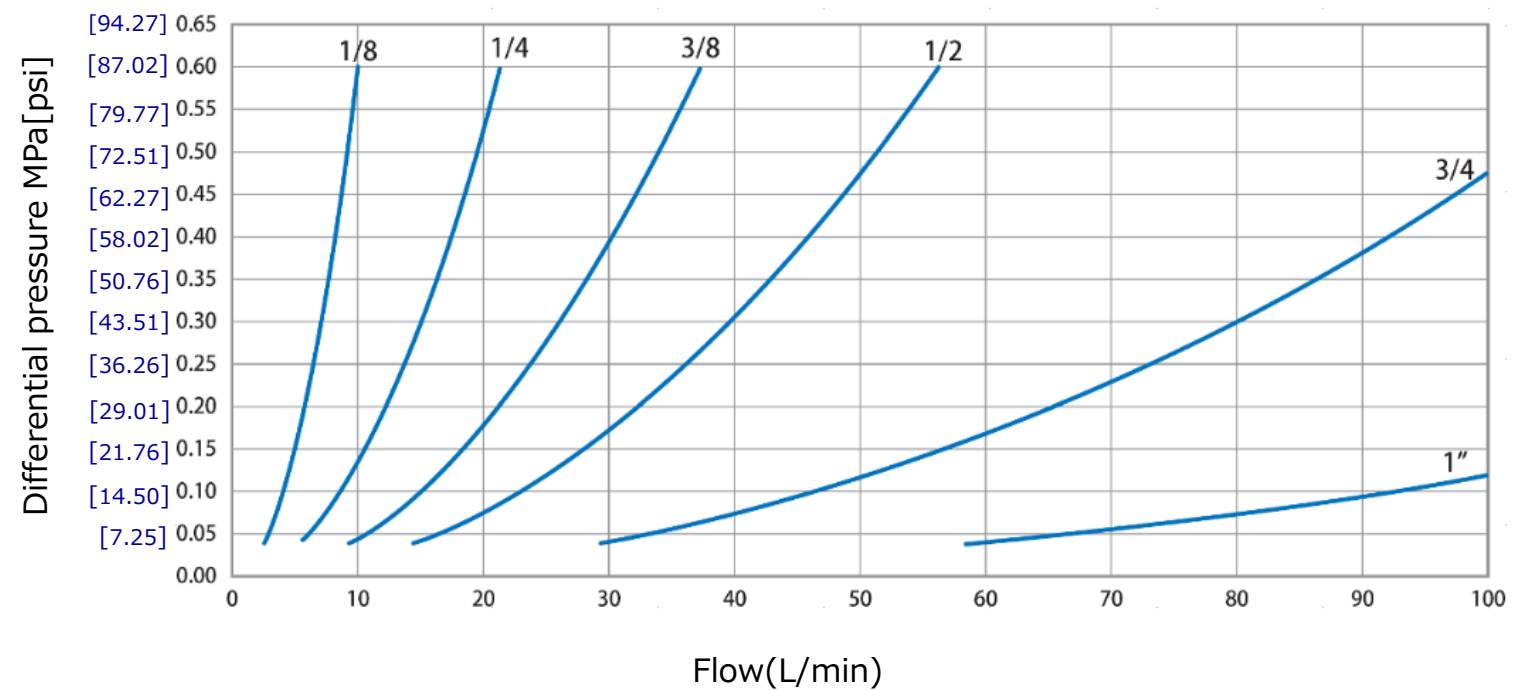
# FUJIKURA COMPOSITES

## Characteristic

### FLOW CHARACTERISTICS AIR (Reference)

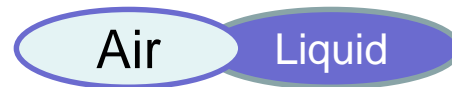


### FLOW CHARACTERISTICS WATER (Reference)





## “FCH” series



High pressure model. Corresponds to compressed air and liquid.

### ■ Features

- High pressure range.(SUS316 can use 13MPa [1885.49psi]).
- Damages to seal material were reduced by double-touch system (O-ring and metal-seal).
- All metal material adopt SUS316.



### ■ Applications

- Machine Tools : Milling machine, NC lathe, laser processing machine etc.
- Industrial furnace : General industrial furnace, heating furnace, vacuum furnace, etc.
- Medical : Endoscope washing device, oxygen concentrator, anesthesia machine etc.
- Analysis equipment: Measurement equipment, component gas analysis, gas analyzer etc.
- Battery : Household fuel cell, secondary battery, gas engine etc.
- Water (liquid) treatment: Pure water production, pure water recycling.
- Gas generator related: Compressor, compact pressure vessel, various gas generator etc.
- Others: Oxygen capsule, gasoline measuring instrument, forklift etc.

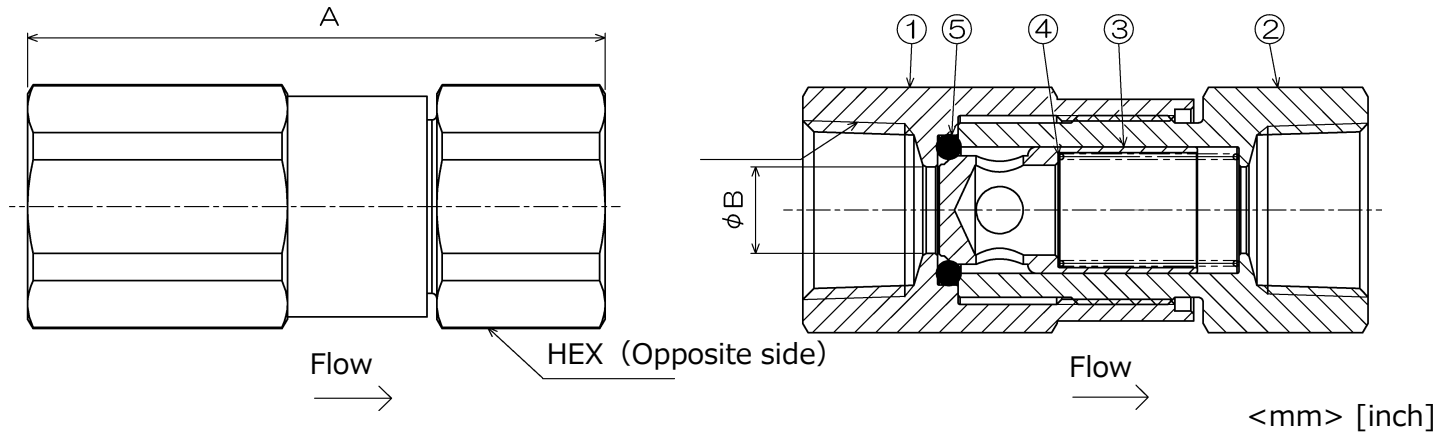
### ■ Specification

Set pressure MPa[psi]	FCHB	0~10 [0~1450.38]	Body material	Brass / SUS316
	FCHT	0~13 [0~1885.49]	Seal material	FKM (Standard)
Pressure resistant MPa[psi]	FCHB	15 [2175.57]	Operating temperature	Pursuant to seal material
	FCHT	20 [2900.75]	Cracking pressure kPa[psi]	7 [1.02]
Pipe port	Rc1/4~Rc1/2			
Comment	If you need other cracking pressure please contact us.			



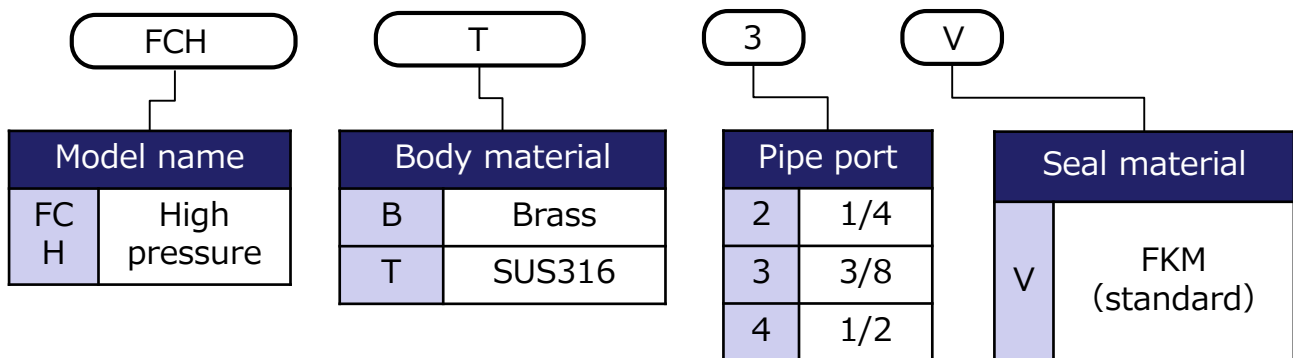


## ■ Size



Pipe port(R)	A	B	HEX (Opposite side)	CV value (Reference)
1 / 4	<46.5> [1.83]	<5.0> [0.20]	<19.0> [0.75]	<0.5>
3 / 8	<60.0> [2.36]	<9.2> [0.36]	<24.0> [0.94]	<1.5>
1 / 2	<73.0> [2.87]	<9.2> [0.36]	<27.0> [1.06]	<1.5>

## ■ Model designation

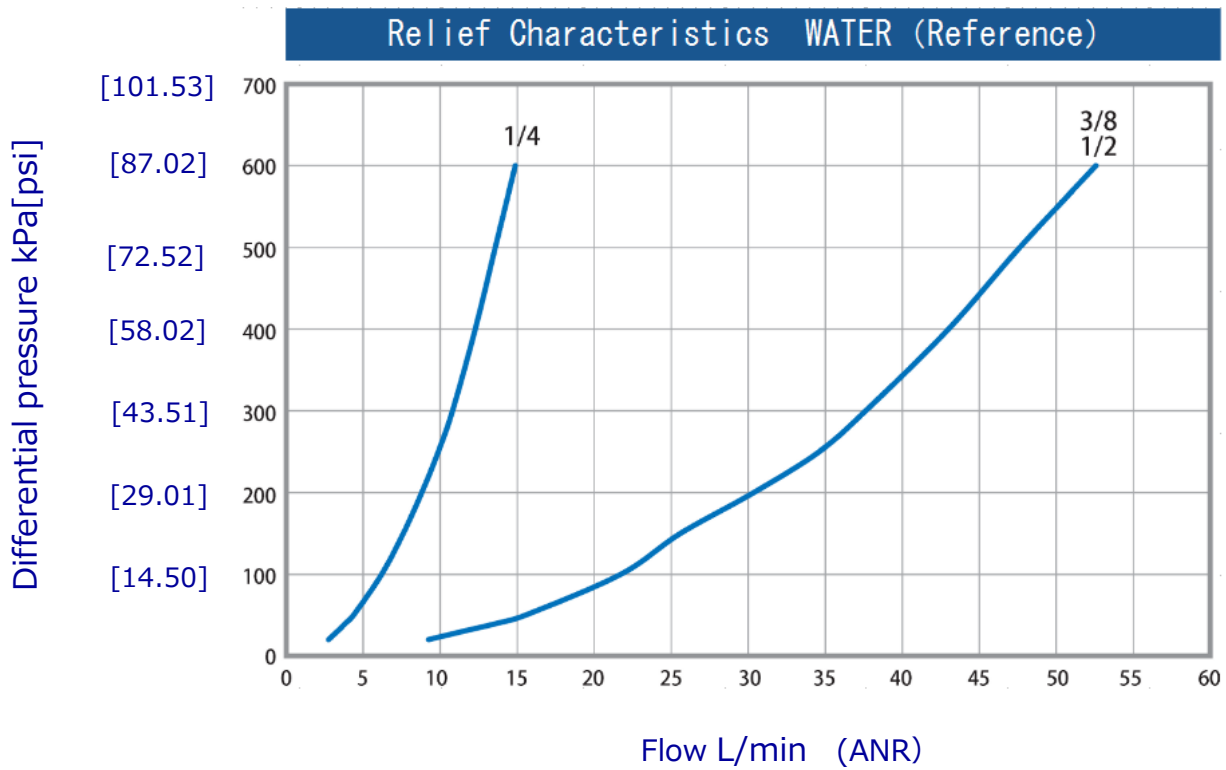


※Please inquire about other materials.

※When operating temperature ranges are more than 100°C[212°F] or less or -20°C[-4°F], contact us.



## ■ Characteristic





## “FHVC” series

Air

High flow model.

### ■ Features

- New design “Full bore” correspond high flow rate.
- Designed to reduce damages for seal material.
- Various port sizes and seal materials.
- Installation direction is free.



### ■ Applications

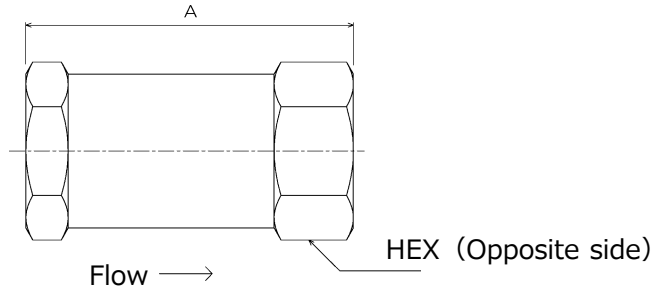
- Machine Tools : Milling machine, NC lathe, laser processing machine etc.
- Industrial furnace : General industrial furnace, heating furnace, vacuum furnace, etc.
- Medical : Endoscope washing device, oxygen concentrator, anesthesia machine etc.
- Analysis equipm ent: Measurement equipment, component gas analysis, gas analyzer etc.
- Battery : Household fuel cell, secondary battery, gas engine etc.
- Water (liquid) treatment: Pure water production, pure water recycling.
- Gas generator related: Compressor, compact pressure vessel, various gas generator etc.
- Others: Oxygen capsule, gasoline measuring instrument, forklift etc.

### ■ Specification

Working fluid	Gas		Pipe port	Rc1/8~Rc1
Set pressure MPa[psi]	FHVCB	8 [1160.30]	Seal material	FKM(Standard)
	FHVCT	13 [1885.49]	Operating temperature	Pursuant to seal material
Pressure-resistant MPa[psi]	FHVCB	12 [1740.45]	Backup ring material	PTFE
	FHVCT	20 [2900.75]	Cracking pressure kPa[psi]	7 [1.02]Standard)
Body material	Brass / SUS316			
Comment	<ul style="list-style-type: none"> <li>■ Please contact us if you wish to connect with other port size (~ 2 ").</li> <li>■ Option cracking pressure 1kPa, 20KPa,50KPa [0.15psi, 2.90psi, 7.25psi] are available.*Body material is SUS303 or SUS304</li> <li>■ Please contact us for liquid application.</li> </ul>			



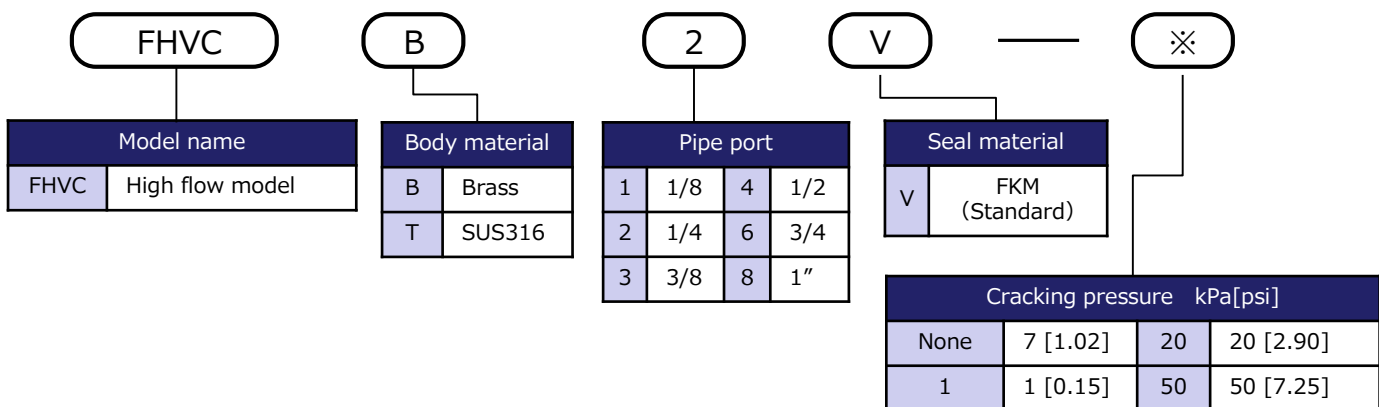
## ■ Size



<mm> [inch]

Pipe port(R)	A	HEX (Opposite side)	CV (Reference)
1 / 8	<43.0> [1.69]	<21.0> [0.83]	<0.95>
1 / 4	<57.0> [2.24]	<27.0> [1.06]	<2.1>
3 / 8	<62.0> [2.44]	<29.0> [1.14]	<3.1>
1 / 2	<75.0> [2.95]	<41.0> [1.61]	<5.2>
3 / 4	<86.0> [3.39]	<46.0> [1.81]	<7.4>
1"	<101.0> [3.98]	<50.0> [1.97]	<11.7>

## ■ Model designation



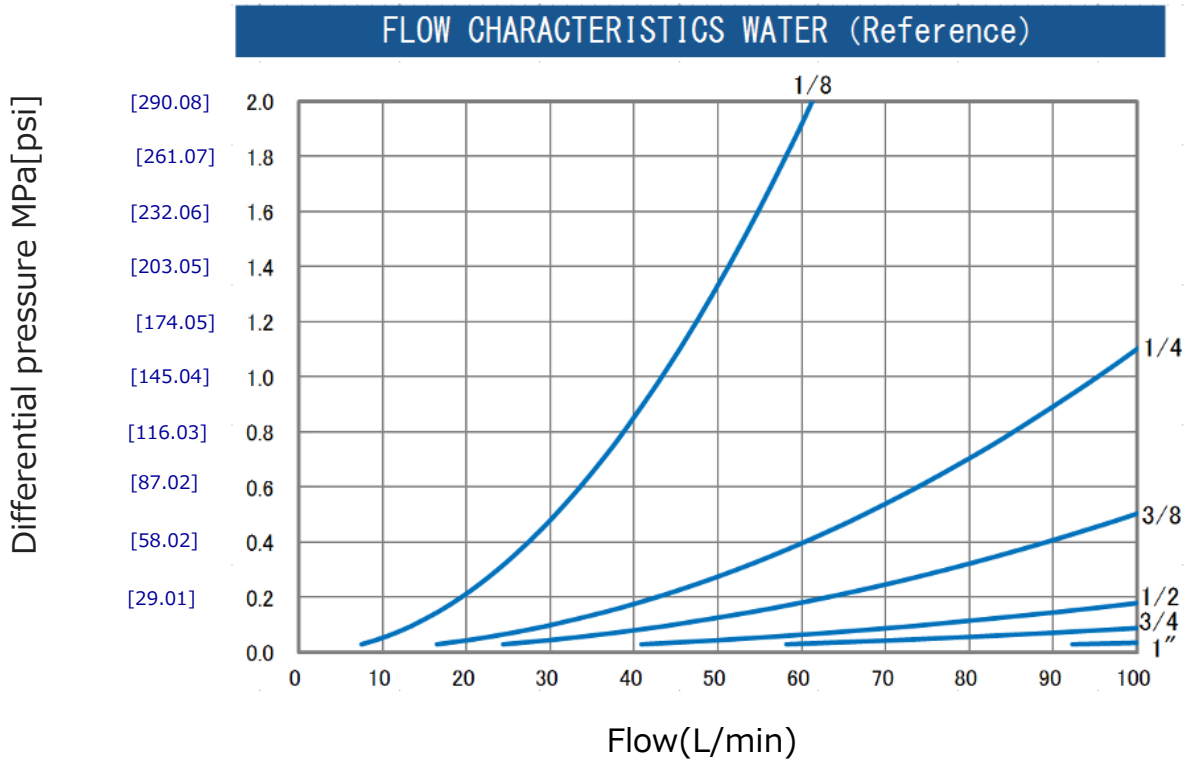
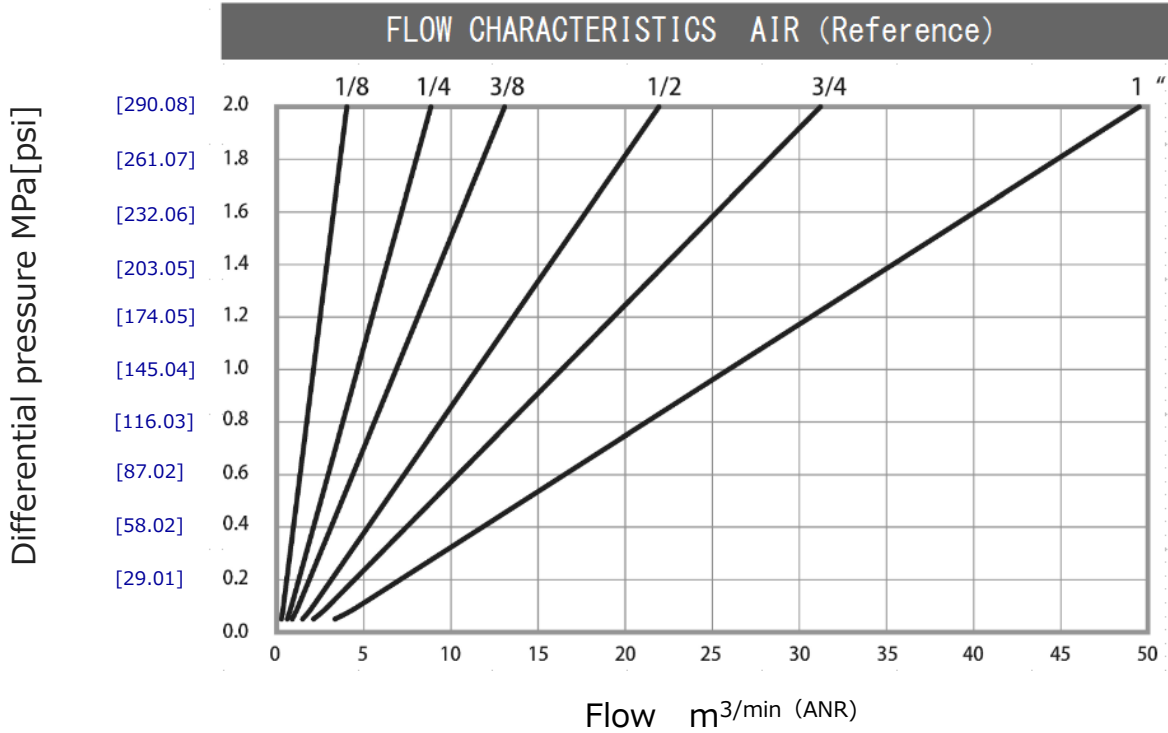
※Please inquire about other materials.

※When operating temperature ranges are more than 100°C[212°F] or less or -20°C[-4°F], contact us.



# FUJIKURA COMPOSITES

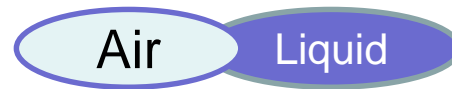
## ■ Characteristic





# FUJIKURA COMPOSITES

## “FCAM” series



Cracking pressure adjustment model. Corresponds to compressed air and liquid.

### ■ Features

- Adjustment of cracking pressure is possible.
- High pressure model (maximum working pressure: 20 MPa[2900.75psi]).
- Ideal for small-volume applications such as prototype, research, etc.
- Compact, lightweight design.



### ■ Applications

- Machine Tools : Milling machine, NC lathe, laser processing machine etc.
- Industrial furnace : General industrial furnace, heating furnace, vacuum furnace, etc.
- Medical : Endoscope washing device, oxygen concentrator, anesthesia machine etc.
- Analysis equipment: Measurement equipment, component gas analysis, gas analyzer etc.
- Battery : Household fuel cell, secondary battery, gas engine etc.
- Water (liquid) treatment: Pure water production, pure water recycling.
- Gas generator related: Compressor, compact pressure vessel, various gas generator etc.
- Others: Oxygen capsule, gasoline measuring instrument, forklift etc.

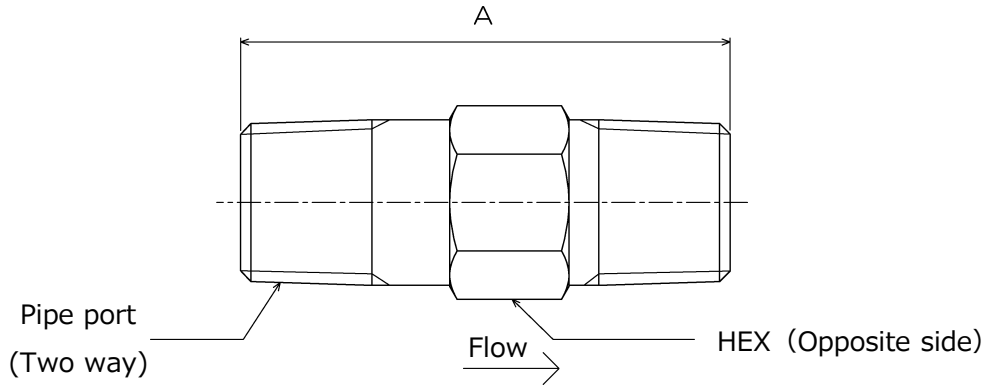
### ■ Specification

Maximum pressure MPa[psi]	20 [2900.75]	Seal material	FKM(Standard)			
Pressure resistance MPa[psi]	30 [4351.13]	Operating temperature	Pursuant to seal material			
Body material	Brass / SUS316	Cracking pressure kPa[psi]	A	20~100 [2.90~14.50]	D	1010~2400 [146.49~348.09]
Pipe port	Rc1/4, Rc1/2		B	110~350 [15.95~50.76]	E	2410~4100 [349.54~594.65]
			C	360~1000 [52.21~145.04]		
Adjusting tool	Hex wrench 1/4=4mm[0.16in.] 1/2=8mm[0.31in.]					
Comment	<ul style="list-style-type: none"> <li>■ If you need internal type, contact us.</li> <li>■ Tool for control is not attached.</li> </ul>					



# FUJIKURA COMPOSITES

## ■ Size



Pipe port(R)	A	HEX (Opposite side)	CV (Reference)
1 / 4	<41.0> [1.61]	<14.0> [0.55]	<0.35> [0.04]
1 / 2	<65.0> [2.56]	<23.0> [0.91]	<1.25> [0.08]

## ■ Model designation

FCAM    
 B    
 2    
 V    
 —    
 B

Model name		Body material		Pipe port		Seal material		Springe kPa[psi]	
FCAM	Cracking pressure adjustment model.	B	Brass	2	1/4	V	FKM (Standard)	Code	Cracking pressure
		T	SUS316	4	3/8			A	20~100 [2.90~14.50]
								B	110~350 [15.95~50.76]
								C	360~1000 [52.21~140.04]
								D	1010~2400 [146.49~348.09]
								E	2410~4100 [349.54~594.65]

※Please inquire about other materials.

※When operating temperature ranges are more than 100°C[212°F] or less or -20°C[-4°F], contact us.

### 【Caution】

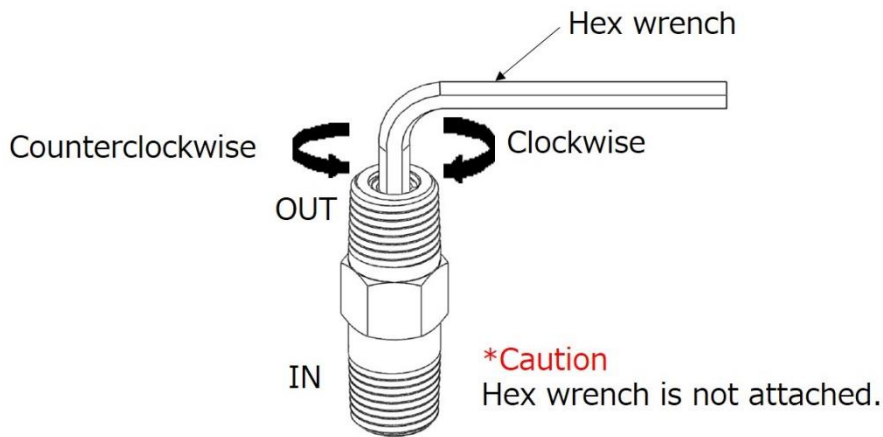
If you request for cracking pressure, please write cracking pressure after spring code by <kPa[psi]>. (Air pressure is not marked on body.)

Example) FCAMB2V-B-300  
 300kPa[43.51psi] (Minimum setting pressure 10kPa[1.45])

If you have no request, pressure is set minimum range.



## ■ Adjustment method



- 1) Turn a fixed nut counterclockwise and loosen it, with a hexagon wrench.
- 2) Insert a hexagon wrench to pressure control nut and coordinate cracking pressure.

Clockwise direction: Higher  
Counterclockwise direction: Lower

- 3) Pull back a hexagon wrench to the bottom of the fixed nut and turn it clockwise and lock it.
- 4) Please confirm cracking pressure.





## "FC8" series



FC8 series adopted resin POM for the body. Corresponds to compressed air and liquid.

### ■ Features

- "FC8 series" is lightweight because resin.
- In addition to tap water, various liquids can be used.
- Piping installation posture is free.
- Low cracking specification.



### ■ Applications

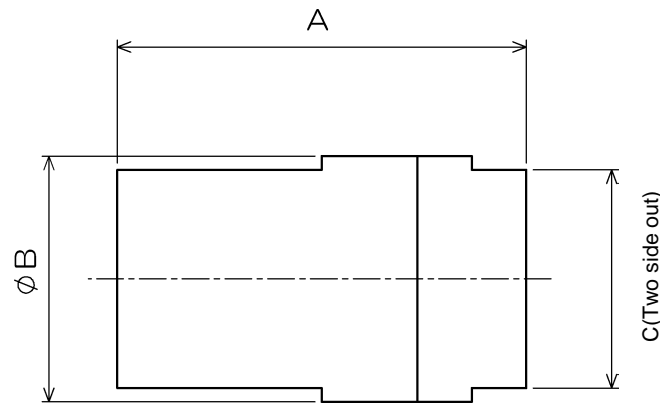
- Machine Tools : Milling machine, NC lathe, laser processing machine etc.
- Industrial furnace : General industrial furnace, heating furnace, vacuum furnace, etc.
- Medical : Endoscope washing device, oxygen concentrator, anesthesia machine etc.
- Analysis equipment: Measurement equipment, component gas analysis, gas analyzer etc.
- Battery : Household fuel cell, secondary battery, gas engine etc.
- Water (liquid) treatment: Pure water production, pure water recycling.
- Gas generator related: Compressor, compact pressure vessel, various gas generator etc.
- Others: Oxygen capsule, gasoline measuring instrument, forklift etc.

### ■ Specification

Working fluid	Water / Air	Pipe port	Rc1/4~Rc1/2
Operating pressure MPa[psi]	0 ~ 0.5 [0 ~ 72.52]	Body material	POM
Pressure Resistance MPa[psi]	0.8 [116.03]	Seal material	FKM(Standard)
Cracking pressure kPa[psi]	3 [0.44]	Operating temperature range °C[°F]	5~55 [41~131]
Comment	<ul style="list-style-type: none"> <li>■ Because body is made by resin, please be careful about the leak from a screw, plumbing stress at the time of the plumbing construction.</li> <li>■ As for temperature is more than 45°C [113°F], continuations more than one hour are unusable.</li> <li>■ If you use other fluids, please contact us.</li> <li>■ If you use other material (EPDM, NBR, Perfluor, etc), please contact us.</li> </ul>		



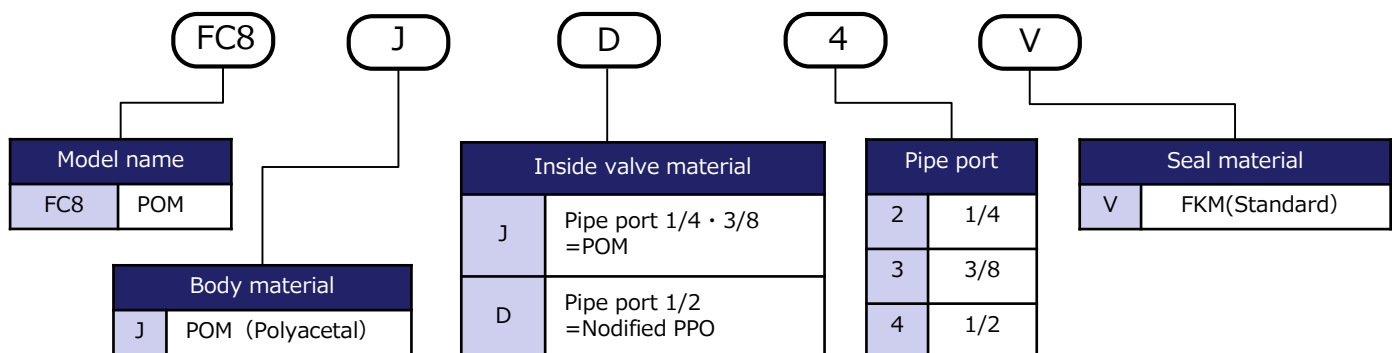
## ■ Size



<mm> [inch]

Pipe port(R)	A	B	C
1 / 4	<55> [2.17]	<32> [1.26]	<28> [1.10]
3/8	<57> [2.24]	<34> [1.34]	<30> [1.18]
1/2	<60> [2.36]	<36> [1.42]	<32> [1.26]

## ■ Model designation

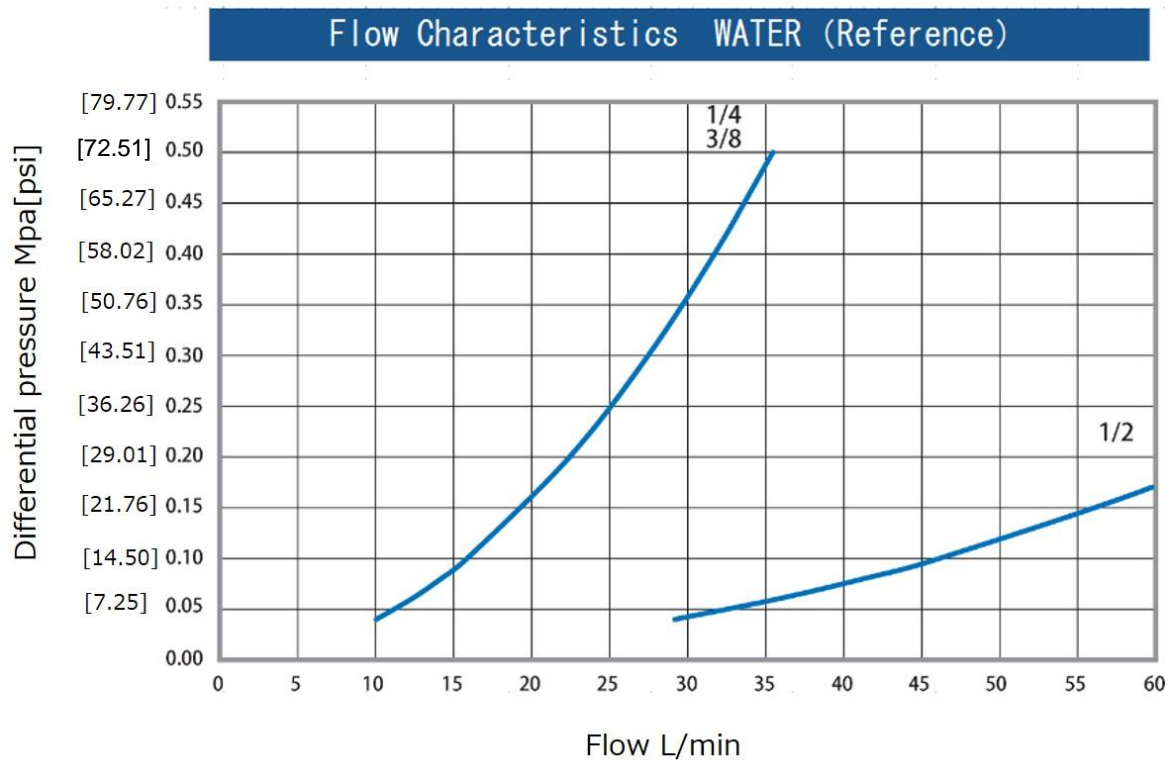
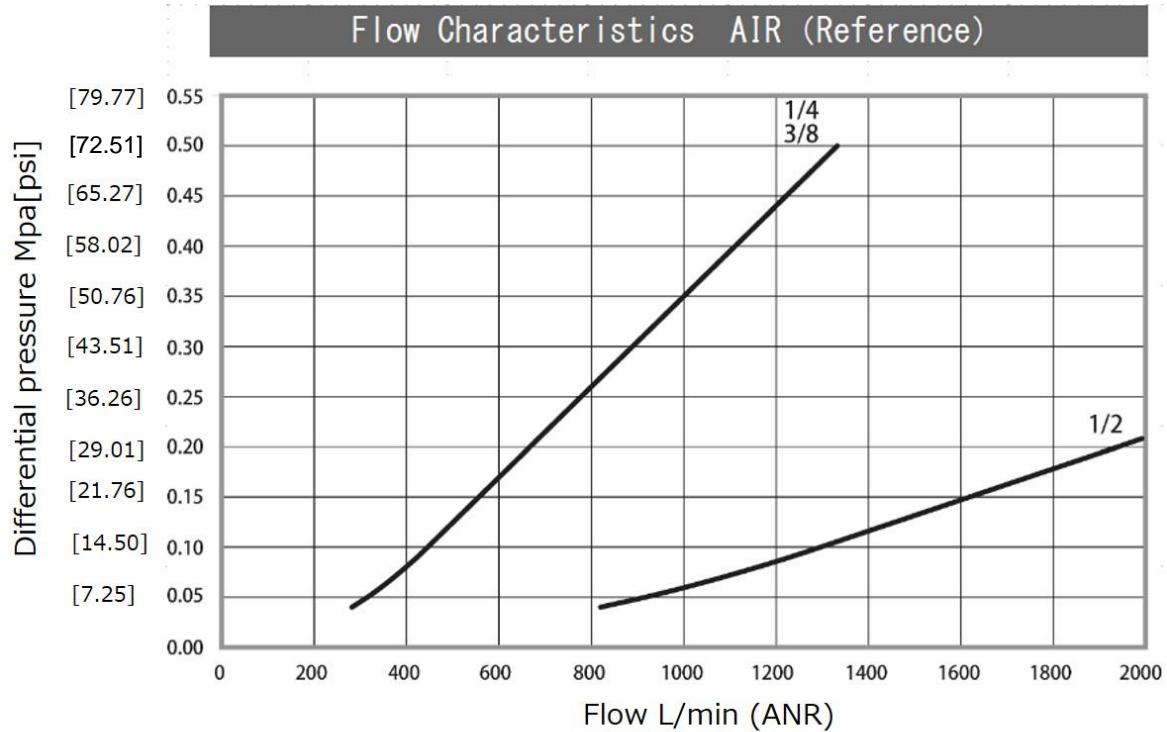


\* For other materials, please contact us. (EPDM, NBR, Perfluor, etc.)



# FUJIKURA COMPOSITES

## ■ Characteristic



FUJIKURA COMPOSITES

### Contact us

Control Equipment

Head office: TOC Ariake East Tower 10F, 3-5-7 Ariake,  
Koto-ku, Tokyo, Japan 135-0063

TEL +81-3-3527-8573

E-mail: [seigyotoiawase.en@fc.fujikura.co.jp](mailto:seigyotoiawase.en@fc.fujikura.co.jp)

URL: <https://www.fujikura-control.com/>



# FUJIKURA COMPOSITES

## “VC-P” series

Air

Liquid

Low pressure / low pressure cracking type resin check valve.

Corresponds to compressed air and liquid(water).

### ■ Features

- Compact (OD φ18mm[0.71inch]), Light weight (33g[0.07pound]).
- Cracking pressure is extremely low: 1 kPa [0.15psi] or less.
- Leakage is minute: 1 ml / min or less at 10 kPa [1.45psi].



### ■ Applications

- Machine Tools : Milling machine, NC lathe, laser processing machine etc.
- Industrial furnace : General industrial furnace, heating furnace, vacuum furnace, etc.
- Medical : Endoscope washing device, oxygen concentrator, anesthesia machine etc.
- Analysis equipment: Measurement equipment, component gas analysis, gas analyzer etc.
- Battery : Household fuel cell, secondary battery, gas engine etc.
- Water (liquid) treatment: Pure water production, pure water recycling.
- Gas generator related: Compressor, compact pressure vessel, various gas generator etc.
- Others: Oxygen capsule, gasoline measuring instrument, forklift etc.

### ■ Specification

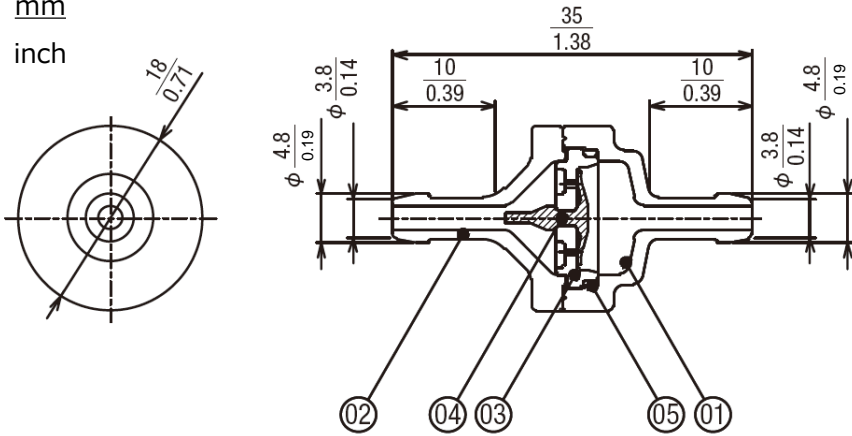
Working Fluid		Clean compressed air
Pressure	kPa[psi]	200 [29.01]
Pressure resistant	kPa[psi]	250[36.26] .MAX
Cracking pressure	kPa[psi]	1[0.15] or less
Pipe connection diameter		Tube ID φ4
Body material		Polyacetal
Rubber material		EPDM
Operating temperature Range	°C[°F]	5~60 [41~140]
Weight	g[pound]	3 [0.0066]
Leak	mL/min(ANR) (@10kPa[1.45psi])	1



# FUJIKURA COMPOSITES

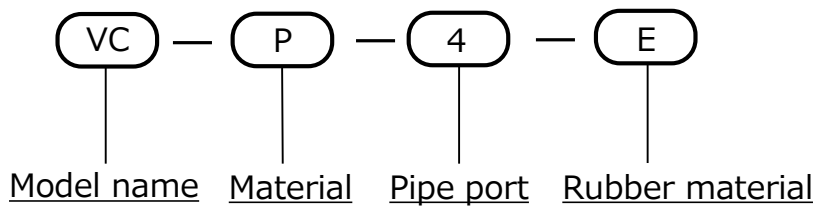
## Size

mm  
inch



No	Name	Material
①	Housing A	Polyacetal
②	Housing B	Polyacetal
③	Attachment	Polyacetal
④	Umbrella	EPDM
⑤	O-ring	EPDM

## Model designation



## Characteristic

Flow characteristics

