

FINE series PURE Standard series



FUCL-715-6.35



FUD-95-6.35



FUBV-915-6.35

STOP VALVE

NEEDLE VALVE

UPPER MINI BALL VALVE

LINE CHECK VALVE

FILTER

Ministry-certified high-pressure products

STOP VALVE

NEEDLE VALVE

UPPER MINI BALL VALVE

LINE CHECK VALVE

FILTER

Fujikin's Class 1 cleanrooms feature cutting-edge technology throughout and must satisfy the most rigorous standards for cleanliness. Products manufactured in this environment are therefore guaranteed to meet the most stringent requirements and to be of the highest quality in the world.





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Standard Series

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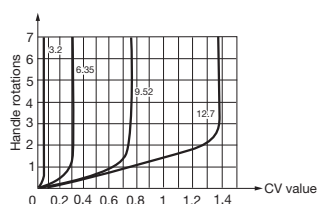
Filters

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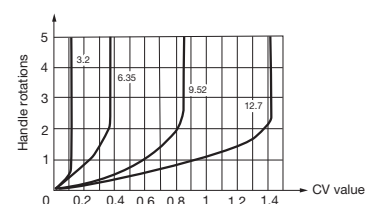
Stop Valves

Stainless Steel 4.9 MPa (ON/OFF)

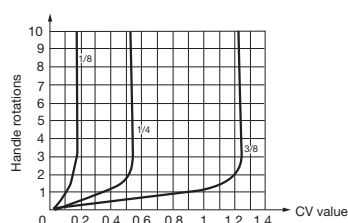
FUD-95 type



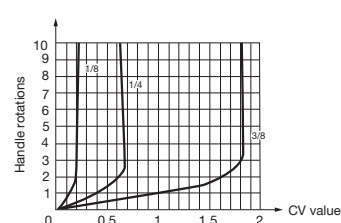
FUD-05 type



FUD-15 type



FUD-35 type

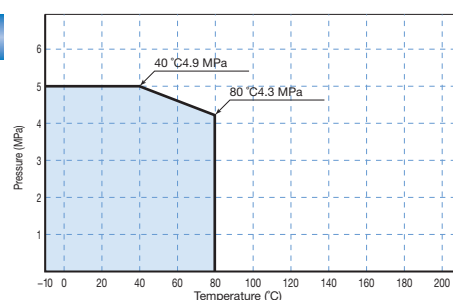


Features / Specifications

- Gas contact components are completely oil-free.
- Small and lightweight.
- Ministry-certified high-pressure products are also available.
- Externally threaded gland packing construction.

Material	Part Name	Material
	Body	SUS316L
	Bonnet	SUS316
	Stem	SUS316
	Disk Packing	PCTFE
	Gland Packing	PTFE / PFA
	Handle	A5056

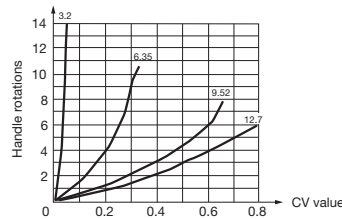
Temperature-Pressure Rating



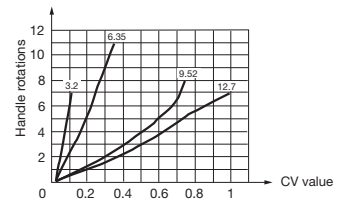
Needle Valves

Stainless Steel 4.9 MPa (Flow Control)

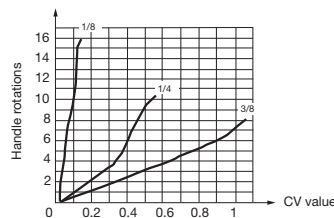
FUN-95 type
FUE-95 type
FUH-95 type



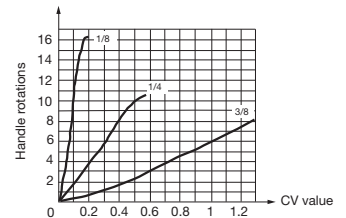
FUN-05 type
FUE-05 type
FUH-05 type



FUN-15 type
FUE-15 type
FUH-15 type



FUN-35 type
FUE-35 type
FUH-35 type

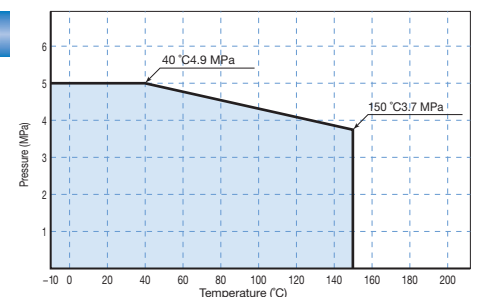


Features / Specifications

- Gas contact components are completely oil-free.
- Small and lightweight.
- Enables highly precise control of flow rate.
- Ministry-certified high-pressure products are also available.
- Externally threaded gland packing construction.

Material	Part Name	Material
	Body	SUS316L
	Bonnet	SUS316
	Stem	SUS316
	Gland Packing	PTFE / PFA
	Handle	A5056

Temperature-Pressure Rating



Specifications

Stop Valves

Specifications	Nominal Diameter	Maximum Operating Pressure	Operating Temperature Range	Orifice Diameter	Max. Cv Value	Valve Type	Connection Fitting
	3.2	4.9 MPa	-10 °C to + 80 °C	2.5	0.05	Globe Angle	F900 Fitting Threaded Fitting
	1/8B			2.5	0.16		
	6.35			5	0.3		
	1/4B			5	0.5		
	9.52			8	1		
	3/8B			8	1.2		
	12.7			8	1.37		

Needle Valves

Specifications	Nominal Diameter	Maximum Operating Pressure	Operating Temperature Range	Orifice Diameter	Max. Cv Value	Valve Type	Connection Fitting
	3.2	4.9 MPa	-10 °C to + 150 °C	2.5	0.045	Globe Angle	F900 Fitting Threaded Fitting
	1/8B			2.5	0.125		
	6.35			5	0.3		
	1/4B			5	0.45		
	9.52			8	0.62		
	3/8B			8	1		
	12.7			8	0.78		

Options

NPT Thread Rc thread is the standard for threaded connections, but NPT threaded fittings are also available.

Product Numbers When ordering, please use the product number designations below to specify your selections.

FU E - 9 5 - 6.35

A

B

C

D

E

E

D

C

B

A

Piping Connection Diameter
3.2: 1/8 OD
6.35: 1/4 OD
9.52: 3/8 OD
12.7: 1/2 OD (Valve diameter is 9.52 when connecting to UJR)

A: Rc1/8
B: Rc1/4
C: Rc3/8 (No " - " is needed for threaded connections)

5: Maximum Operating Pressure: 4.9 MPa

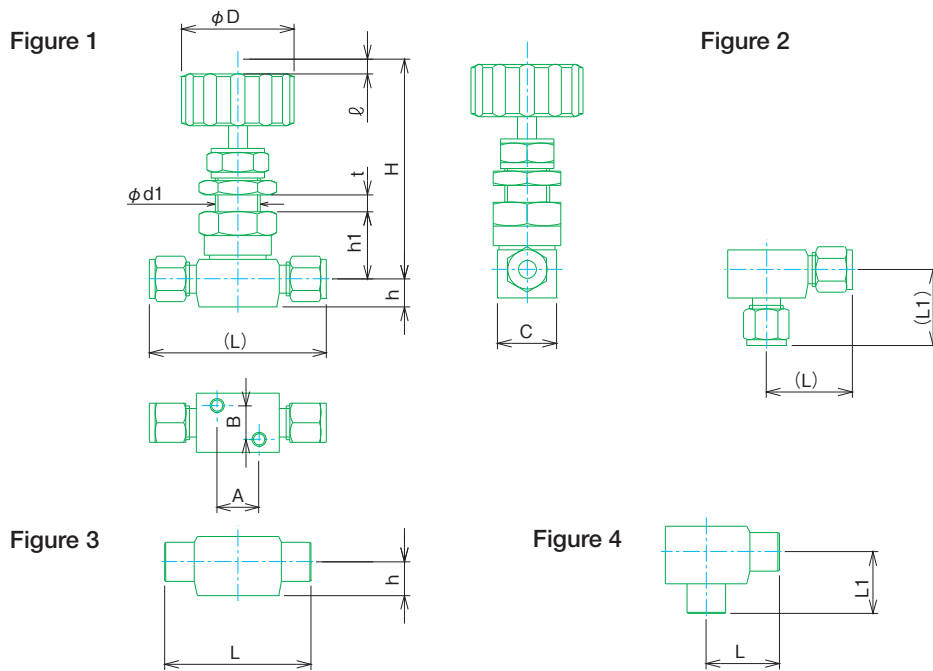
1: Threaded, Globe-type
3: Threaded, Angle-type
9: F900 Fitting, Globe-type
0: F900 Fitting, Angle-type

N: Ultra Micro Flow Control Valves
E: Micro Flow Control Valves
H: Standard Flow Control Valves
D: Stop Valves

FU: Fine Series Stainless Steel Valves

When shipping products, the product number may end with #A, #B, etc. These are production history indicators and do not represent any functional or dimensional changes.

Dimensions



(Unit: mm)

Nominal Diameter	Product Number	Ref. Fig.	End-to-End Length		Height	Panel Mounting Part	$\phi d1$	t	h	Lift ℓ	Handle ϕD	A	B	C
			L	L1	H	h1								
3.2	FUN-95-3.2	1	57	–	69	24	14.5	6	10	7	32	15	12	21
	FUD-95-3.2													
6.35	FUE-95-6.35	1	63	–	73	24	16.5	6	9.5	7	40	15	12	21
	FUD-95-6.35													
9.52	FUH-95-9.52	1	71	–	81	26	20.5	6	11.5	7	50	20	15	26
	FUD-95-9.52													
12.7	FUH-95-12.7	1	81	–	82	27	20.5	6	14	7	50	20	15	26
	FUD-95-12.7													
3.2	FUN-05-3.2	2	28.5	23	69	24	14.5	6	–	7	32	–	–	21
	FUD-05-3.2													
6.35	FUE-05-6.35	2	30.5	27	73	24	16.5	6	–	7	40	–	–	21
	FUD-05-6.35													
9.52	FUH-05-9.52	2	33.5	30	81	26	20.5	6	–	7	50	–	–	26
	FUD-05-9.52													
12.7	FUH-05-12.7	2	40.5	35	82	27	20.5	6	–	7	50	–	–	26
	FUD-05-12.7													
1/8B	FUN-15A	3	46	–	71	24	14.5	6	10	7	32	15	12	21
	FUD-15A													
1/4B	FUE-15B	3	52	–	75	26	16.5	6	12	7	40	15	12	21
	FUD-15B													
3/8B	FUH-15C	3	58	–	83	28	20.5	6	13	7	50	20	15	26
	FUD-15C													
1/8B	FUN-35A	4	23	19	71	24	14.5	6	–	7	32	–	–	21
	FUD-35A													
1/4B	FUE-35B	4	26	22	75	26	16.5	6	–	7	40	–	–	21
	FUD-35B													
3/8B	FUH-35C	4	29	25	83	28	20.5	6	–	7	50	–	–	26
	FUD-35C													

*For components without a corresponding reference diagram indicated, please refer to Figure 1.

Super Mini Ball Valves

Stainless Steel 16.2 MPa



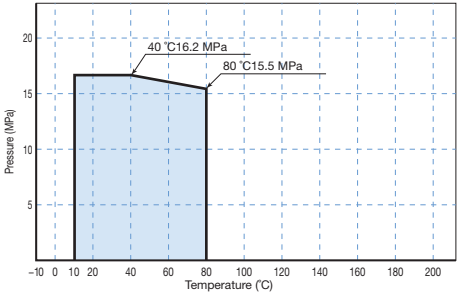
Features

- Gas contact components are completely oil-free.
- Small and lightweight.
- Ministry-certified high-pressure products are also available.
- Support-type is panel mount.

Specifications

Material	Part Name	Material
	Body	SUS316
	Ball	SUS316
	Ball Seat Packing	Special Packing
	Gland Packing	PTFE
	Handle	ZDC2

Temperature-Pressure Rating



3-way Super Mini Ball Valves

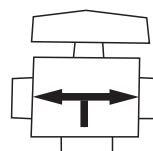
Stainless Steel 16.2 MPa



Features

- Gas contact components are completely oil-free.
- Small and lightweight.
- Ministry-certified high-pressure products are also available.
- Support-type is panel mount.

*For 3-way valves, please install the piping according to the flow direction indicated. Do not use in the opposite direction to the indication, as this may not completely shut off the flow.

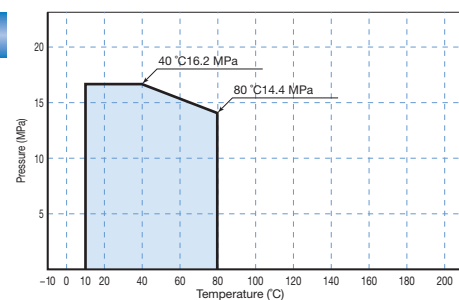


The flow direction is as shown in the diagram at left, entering from the bottom of the valve and flowing to the left and right.

Specifications

Material	Part Name	Material
	Body	SUS316
	Ball	SUS316
	Ball Seat Packing	Special Packing
	Gland Packing	PTFE
	Handle	ZDC2

Temperature-Pressure Rating



Specifications

Specifications	Nominal Diameter	Maximum Operating Pressure	Operating Temperature Range	Max. Cv Value	Connection Fitting
	3.2	16.2 MPa	10 °C to + 80 °C	0.23	F900 Fitting UJR Fitting Threaded Fitting
	6.35 (1/4B)			2-way valve: 0.6	
				3-way valve: 0.5	
	9.52 (3/8B)			2-way valve: 2	
				3-way valve: 2	
	12.7 (1/2B)			2-way valve: 4	
				3-way valve: 4	

Caution



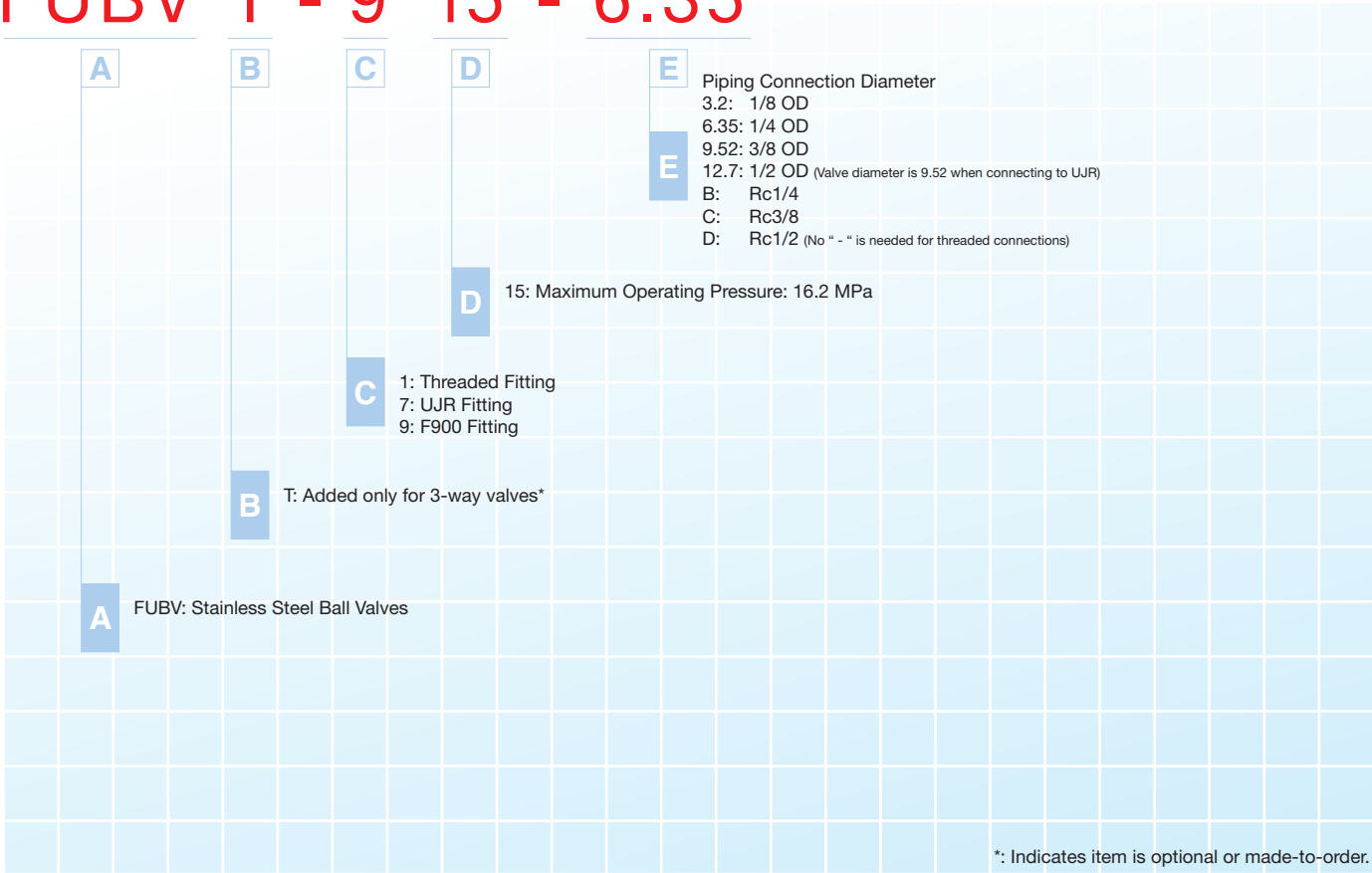
If the fluid is a liquid, and the temperature rises while the body cavity (pocket) is filled with liquid, an abnormal pressure rise inside the body cavity may occur, damaging the seat. If you suspect this may be the case, please contact Fujikin®.

Options

NPT Thread Rc thread is the standard for threaded connections, but NPT threaded fittings are also available.

Product Numbers When ordering, please use the product number designations below to specify your selections.

FUBV T - 9 15 - 6.35



When shipping products, the product number may end with #A, #B, etc. These are production history indicators and do not represent any functional or dimensional changes.

Dimensions

Figure 1

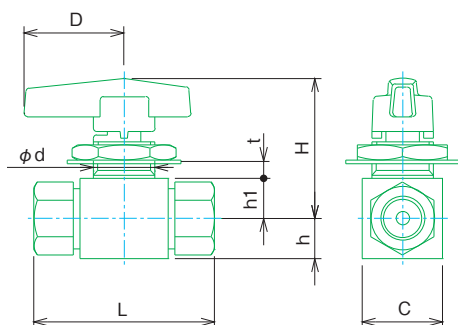


Figure 2

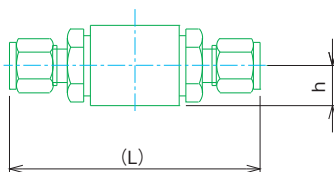


Figure 3

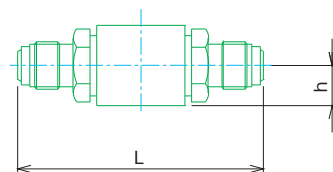


Figure 4

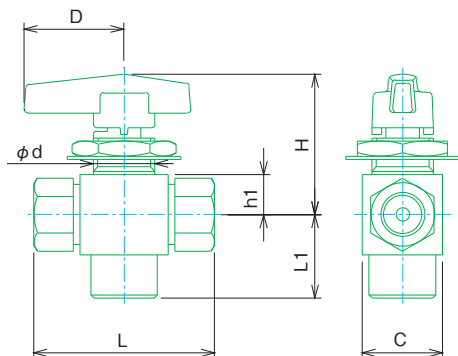


Figure 5

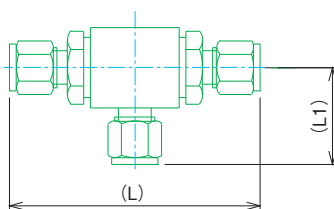
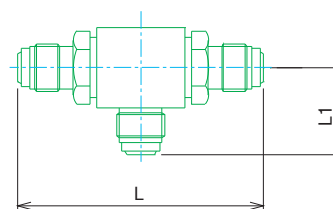


Figure 6



Super Mini Ball Valves

Nominal Diameter	Product Number	Ref. Fig.	End-to-End		Height		Panel Mounting Part		Handle	C
			L	H	h1	d	h	D		
1/4B	FUBV-115B	1	54	42	12	18.5	12	30	24	
3/8B	FUBV-115C	1	55	52	16	27.5	16	35	28	
1/2B	FUBV-115D	1	75	56	20	36.5	20	55	40	
3.2	FUBV-915-3.2	2	70	39	10	14.5	10	25	21	
6.35	FUBV-915-6.35	2	75	42	12	18.5	12	30	24	
9.52	FUBV-915-9.52	2	88	52	16	27.5	16	35	28	
12.7	FUBV-915-12.7	2	121	56	20	36.5	20	55	40	
6.35	FUBV-715-6.35	3	73.6	42	12	18.5	12	30	24	
9.52	FUBV-715-9.52	3	86.6	52	16	27.5	16	35	28	

3-way Super Mini Ball Valves

(Unit: mm)

Nominal Diameter	Product Number	Ref. Fig.	End-to-End		Height		Panel Mounting Part		Handle	
			L	H	L1	h1	d	D	D	C
1/4B	FUBVT-115B	4	54	42	25	12	18.5	30	24	
3/8B	FUBVT-115C	4	55	52	30	16	27.5	35	28	
1/2B	FUBVT-115D	4	75	56	37.5	20	36.5	55	40	
3.2	FUBVT-915-3.2	5	70	39	25	10	14.5	25	21	
6.35	FUBVT-915-6.35	5	75	42	29	12	18.5	30	24	
9.52	FUBVT-915-9.52	5	88	52	35	16	27.5	35	28	
12.7	FUBVT-915-12.7	5	121	56	43	20	36.5	55	40	
6.35	FUBVT-715-6.35	6	73.6	42	26	12	18.5	30	24	
9.52	FUBVT-715-9.52	6	86.6	52	31.5	16	27.5	35	28	

*For components without a corresponding reference diagram indicated, please refer to Figure 1.

Line Check Valves

Stainless Steel 16.2 MPa



Features

- Gas contact components are completely oil-free.
- Small and lightweight.
- Ministry-certified high-pressure products are also available.
- Superior cracking performance.

Important

- ① If the differential pressure is small, such as in a vacuum line, variations in sealing performance may occur.
- ② The check valve seal requires a back pressure depending on the cracking pressure.
- ③ When using for the first time, or if the valve has been closed for an extended period of time, the cracking pressure may be slightly higher than the indicated cracking pressure.
- ④ The cracking pressure is the indicated pressure when there is a constant flow rate, and the valve will begin to open at a pressure lower than the displayed pressure.

Specifications and Materials

Specifications	Nominal Diameter	Maximum Operating Pressure	Operating Fluid Temperature Range	Orifice Diameter	Max. Cv Value	Cracking Pressure	Shut-off Pressure	Connection Fitting
	3.2	16.2 MPa	-10 °C to +80 °C	2.7	0.16	2.26 KPa	0.0294 MPa or more	F900 Fitting UJR Fitting Threaded Fitting
	6.35 (1/4B)			4	0.35	6.86 KPa	0.0294 MPa or more	
	9.52 (3/8B)			7.5	1.1	68.6 KPa	0.0049 MPa or more	
	12.7 (1/2B)			7.5	1.1	172 KPa	0.0049 MPa or more	

Material	Part Name	Material
	Body	SUS316
	Disk	SUS316
	Seat Packing	Fluororubber
	Spring	SUS316WPA
	Gland	SUS316

Option

- Seat Packing: The seat packing material can be changed to suit the type of gas used.

Optional Seat Packing Materials
Chloroprene rubber, Silicone rubber, Ethylene-propylene rubber, Kalrez®, PTFE

- Surface Treatment: UP treatment can be applied.
- NPT Thread: Rc thread is the standard for threaded connections, but NPT threaded fittings are also available.
- In the case of PTFE seat packing, the shut-off pressure is 0.3 MPa or more, regardless of the cracking pressure.

Dimensions

Figure 1

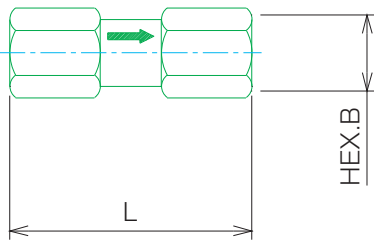


Figure 2

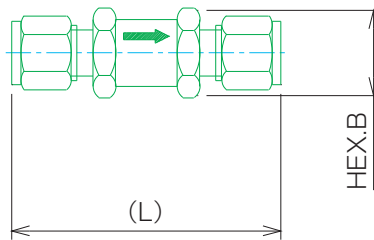
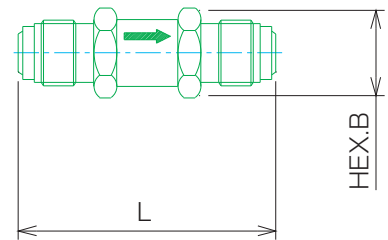


Figure 3



(Unit: mm)

Nominal Diameter	Product Number	Ref. Fig.	L	HEX.B
1/8B	FUCL-115A	1	43	17
1/4B	FUCL-115B	1	53	17
3/8B	FUCL-115C	1	60	23
1/2B	FUCL-115D	1	69	26
3.2	FUCL-915-3.2	2	55	17
6.35	FUCL-915-6.35	2	59	17
9.52	FUCL-915-9.52	2	70.5	23
12.7	FUCL-915-12.7	2	78.5	23
6.35	FUCL-715-6.35	3	56.4	17
9.52	FUCL-715-9.52	3	69.1	23

Product Numbers

When ordering, please use the product number designations below to specify your selections.

FUCL - 9 15 - 6.35 - 0.07 - [] - []

A

B

C

D

E

F

G

UP: UP Treatment*1

CR: Chloroprene Rubber*1
 SI: Silicone Rubber*1
 ER: Ethylene-Propylene Rubber*1
 KA: Kalrez® *1
 TF: PTFE *2

*2 For PTFE seat packing,
 the product number will end with -FXV.

Piping Connection
 Diameter
 3.2: 1/8 OD
 6.35: 1/4 OD
 9.52: 3/8 OD
 12.7: 1/2 OD (Valve diameter is 9.52 when connecting to UJR)
 A: Rc1/8
 B: Rc1/4
 C: Rc3/8
 D: Rc1/2 (No " - " is needed for threaded connections)

15: Maximum Operating Pressure: 16.2 MPa

1: Threaded Fitting
 7: UJR Fitting
 9: F900 Fitting

FUCL: Stainless Steel Line Check Valves

*: Indicates item is optional or made-to-order.

Filters

Stainless Steel 16.2 MPa



Features

- Gas contact components are completely oil-free.
- Small and lightweight.
- Ministry-certified high-pressure products are also available.

Specifications and Materials

Material	Part Name	Material
	Body	SUS316
	Filter Element	SUS316
	Gasket	SUS316 + Ag-plated PTFE

Specifications	Nominal Diameter	Maximum Operating Pressure	Operating Fluid Temperature Range	Filter Type	Connection Fitting
	1/8B	16.2 MPa	-10 °C to + 100 °C	Line-type Tee-type	F900 Fitting UJR Fitting (line-type only) Threaded Fitting
	6.35 (1/4B)				
	9.52 (3/8B)				
	12.7 (1/2B)				

Option

- NPT Thread: Rc thread is the standard for threaded connections, but NPT threaded fittings are also available.
- Element: A wide variety of element sizes are available. Please refer to the tables below.

Line Filter Element Sizes

Nominal Diameter	Element Size (μm)						
	0.1	0.5	2	5	10	40	70
1/8B	△	△	△	△	△	△	△
6.35, 1/4B	○ *1	○ *1	○	○	○	△	△
9.52, 3/8B	○ *2	○ *2	○	○	○	△	△
12.7, 1/2B	△	△	○	○	○	△	△

Tee Filter Element Sizes

Nominal Diameter	Element Size (μm)						
	0.1	0.5	2	5	10	40	70
1/8B	△	△	△	△	△	△	△
6.35, 1/4B	○ *2	○ *2	○	○	○	△	△
9.52, 3/8B	△	△	○	○	○	△	△
12.7, 1/2B	△	△	○ *2	○ *2	○ *2	△	△

*△: Indicates made-to-order. *1: Only Finelok and UJR types are standard.
*2: Only Finelok is standard.

Dimensions

Figure 1

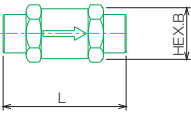


Figure 2

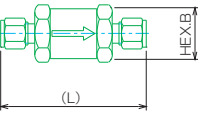


Figure 3

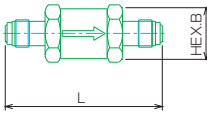


Figure 4

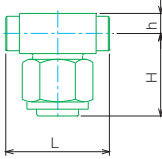
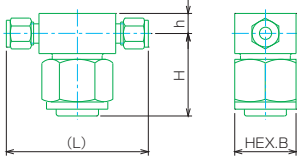


Figure 5



Line Filters

Nominal Diameter	Part Name	Ref. Fig.	L	B
1/8B	FUFL-115A	1	64	26
1/4B	FUFL-115B	1	64	26
3/8B	FUFL-115C	1	78	32
1/2B	FUFL-115D	1	84	32
6.35	FUFL-915-6.35	2	76	26
9.52	FUFL-915-9.52	2	86	32
12.7	FUFL-915-12.7	2	94	32
6.35	FUFL-715-6.35	3	81.8	26
9.52	FUFL-715-9.52	3	84.6	32

Tee Filters

(Unit: mm)

Nominal Diameter	Part Name	Ref. Fig.	L	H	h	B
1/8B	FUFT-115A	4	54	43	10.5	32
1/4B	FUFT-115B	4	54	43	10.5	32
3/8B	FUFT-115C	4	70	52	16	36
1/2B	FUFT-115D	4	70	52	16	36
6.35	FUFT-915-6.35	5	74	43	10.5	32
9.52	FUFT-915-9.52	5	90	50	14	36
12.7	FUFT-915-12.7	5	96	50	14	36

Product Numbers

When ordering, please use the product number designations below to specify your selections.

FUF L - 9 15 - 6.35 - 2

A

B

C

D

E

F

A

FUF: Stainless Steel Filters

B

L: Line-type
T: Tee-type

C

1: Threaded Fitting
7: UJR Fitting
9: F900 Fitting

D

15: Maximum Operating Pressure: 16.2 MPa

E

Piping Connection Diameter
6.35: 1/4 OD
9.52: 3/8 OD
12.7: 1/2 OD (Valve diameter is 9.52 when connecting to UJR)
A: Rc1/8
B: Rc1/4
C: Rc3/8
D: Rc1/2 (No " - " is needed for threaded connections.)

F

Element Size
2: Element 2µm
5: Element 5µm
10: Element 10µm
40: Element 40µm *
70: Element 70µm *

*: Indicates item is optional or made-to-order.

