

Pulse Valve

SMARTVENT Type

JSXF-P□ Series

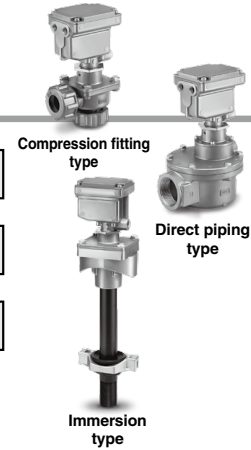


Solenoid Valve Type ▶ p. 7

Air Operated Type ▶ p. 21

How to Order

Compression	JSXF	<div></div>	E	-	06	R	-	5	PR	B	-	S	2		
Direct Piping	JSXF	<div></div>	F	-	06	R	-	5	PR	B	-	S	2		
Immersion	JSXF	<div></div>	H	4	-	06	R	1	-	5	PR	B	-	S	2
		1	2	3		4	5	6		7	8	9	10	11	



1 Valve type

Nil	Solenoid valve
-----	----------------

2 Piping

E	Compression fitting type*1	
F	Direct piping type	
H	Immersion type*2	

*1 Seals and washers are included.

*2 The valve and pipe do not come assembled.

3 Tank size (JSXFH only)

4	4 inch
5	5 inch
6	6 inch
8	8 inch
10	10 inch

4 Port size*1

06	3/4 (20A)
10	1 (25A)
14	1 1/2 (40A)
20*2	2 (50A)

*1 For port size selection, refer to the "Variations for Port Size and Option" table below.

*2 Port size 20 is only available for the JSXFH.

5 Thread type

R	Rc
N	NPT
F	G

6 OUT port piping configuration (JSXFH only)

Symbol	Length	G thread	Appearance
1	Short	None	
2	Long		
3	Short	Yes	
4	Long		

8 Electric control

Symbol	Board type	External input (Differential pressure sensor)
PP*1	Base	With (3 holes)
PB		Without (2 holes)
PR	Remote	Without (2 holes)

*1 When using a differential pressure sensor (provided by the customer), select PP for the base valve. Use a 2-wire type 4 to 20 mA specification differential pressure sensor.

7 Rated voltage

Symbol	Rated voltage
5	24 VDC

9 Fluid and ambient temperatures

B	-40 to 60°C
---	-------------

10 Silencer

Nil	Without
S	With

· Shipped together with the product
· 2 pcs. for 40A and 50A
Refer to "Replacement Parts" on page 20.

11 Electrical entry

Nil	IN side	
2	180° Inverted	

· It can be changed by the customer.
For details, refer to page 44.

Variations for Port Size and Option

Model	Tank size	Port size			
		06	10	14	20
JSXFE	—	●	●	●	—
JSXFF	—	●	●	●	—
JSXFH	4 inch	●	—	—	—
	5 inch	●	●	—	—
	6 inch	—	●	●	—
	8 inch	—	—	●	●
	10 inch	—	—	—	●
Silencer		●	●	●	●

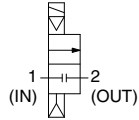


Made to Order

Tank hole dia.: ø76 (Port size 14, 6-inch tank)	p. 33
--	-------

For more information on using SMARTVENT types, refer to the operation manual. Download it from our website: <https://www.smcworld.com>

Symbol



JSXFE Series



JSXFF Series



JSXFH Series

Specifications

Common Specifications

Valve specifications	Valve construction	Pilot operated diaphragm
	Valve type	Normally closed (N.C.)
	Fluid	Air
	Pilot valve orifice dia. [mm]	ø4.5
	Withstand pressure [MPa]	1.5
	Min. operating pressure differential [MPa]	0.1
	Max. operating pressure differential [MPa]	0.9
	Max. system pressure [MPa]	0.9
	Fluid temperature [°C]	-40*1 to 60
	Ambient temperature [°C]	-40 to 60
Coil specifications	Enclosure*2	IP67, NEMA4
	Standards	CE/UKCA
	Rated voltage [V]	24 VDC
	Allowable voltage fluctuation	±10% of the rated voltage
	Allowable leakage voltage	2% or less of the rated voltage
Board specifications	Power consumption*3 [W]	18
	ON time [ms]	100 to 234
	OFF time [s]	4 to 29
	Current consumption [mA]	Base: 25 or less Remote: 15 or less*4

*1 No condensation

*2 For IP67 and NEMA4, wired components must be installed in an input hole or the holes must be plugged.

*3 Power consumption: The value at an ambient temperature of 20°C and when the rated voltage is applied (Variation: ±10%)

*4 Current consumption per remote valve (It is added to match the number of valves.)

Be sure to read "Specific Product Precautions" before handling.

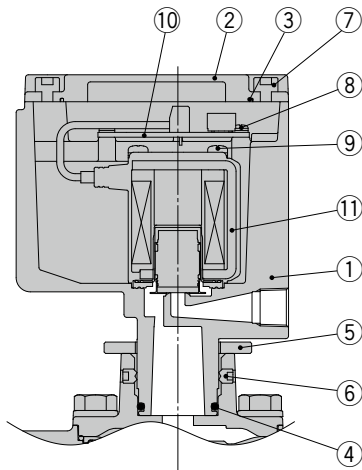
Weight

Model			06		10		14		20	
JSXFE			1,240		1,680		2,620		—	
JSXFF			1,060		1,270		2,000		—	
JSXFH ^{*1}	Tank size		4	5	5	6	6	8	8	10
	Piping configuration	1	1,880	1,890	2,500	2,560	3,480	3,600	5,190	5,360
		2	1,910	1,930	2,550	2,660	3,640	3,830	5,510	5,670
		3	1,880	1,890	2,500	2,560	3,480	3,600	5,190	5,360
		4	1,910	1,930	2,550	2,660	3,640	3,830	5,510	5,670

*1 The tank weight is not included in the weight table.

Construction

Components other than those shown below are the same as those of the air operated type.



Component Parts

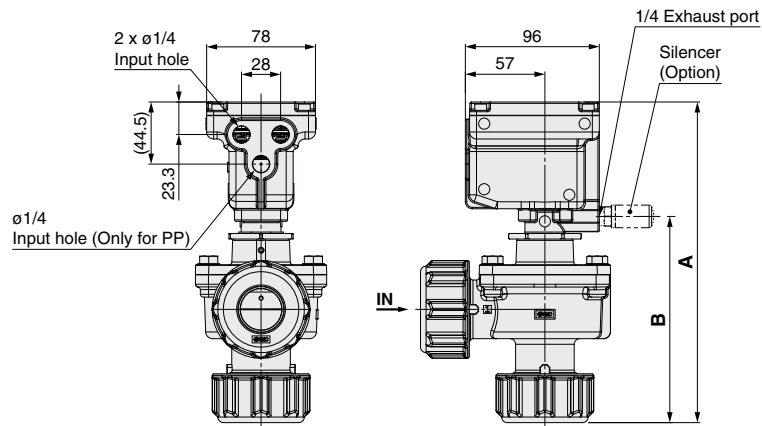
No.	Description	Material
1	Box	ADC
2	Cover	ADC
3	Gasket	NBR
4	O-ring	NBR
5	Nut	Stainless steel
6	Hexagon socket head set screw	Stainless steel
7	Hexagon socket head cap screw	Stainless steel
8	Cross recessed round head screw	Stainless steel
9	Cross recessed round head screw	Fe
10	Board assembly	—
11	Pilot valve	—

Solenoid Valve Type
JSXF SeriesSMARTVENT Type
JSXF-P SeriesAir Operated Type
JSXFA Series

Working Principle

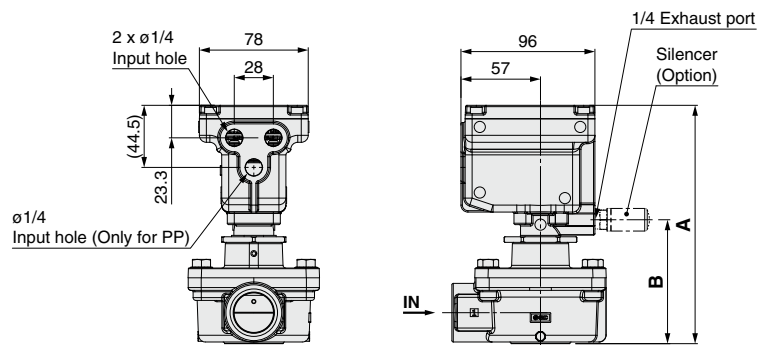
Made to Order

56-JSXF
55-JSXFDedicated Controller
for OperationGlossary of
TermsSpecific Product
Precautions

Dimensions (Dimensions other than those shown below are the same as those of the air operated type.)**JSXFE/Compression fitting type****Dimensions** [mm]

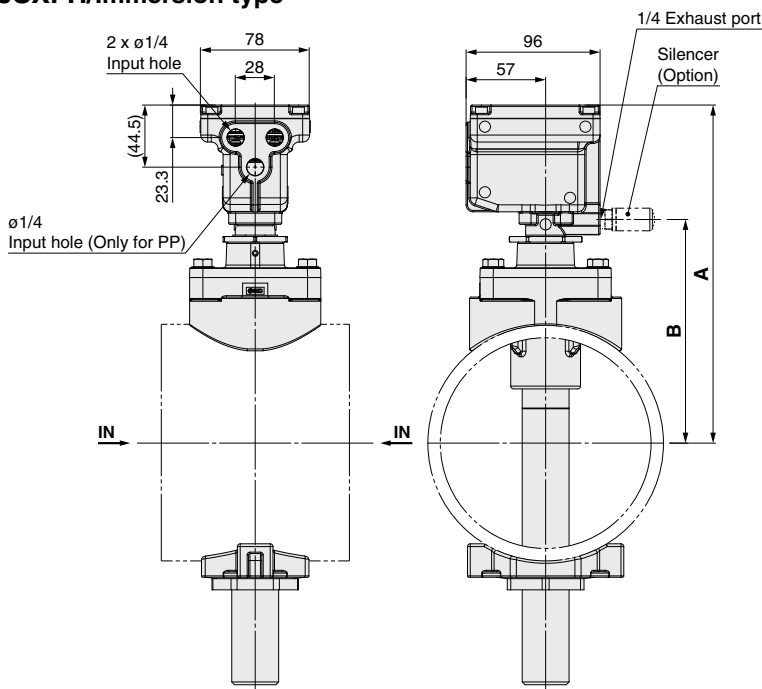
Model	Port size	A	B
JSXFE-06	3/4	196	114
JSXFE-10	1	230	148
JSXFE-14	1 1/2	280	198

The dimensions indicate the values after screw tightening.

JSXFF/Direct piping type**Dimensions** [mm]

Model	Port size	A	B
JSXFF-06	3/4	162	80
JSXFF-10	1	171	89
JSXFF-14	1 1/2	221	139

The dimensions indicate the values after screw tightening.

JSXFH/Immersion type**Dimensions** [mm]

Model	Port size	A	B
JSXFH4-06	3/4	213	131
JSXFH5-06		227	145
JSXFH5-10	1	229	147
JSXFH6-10		242	160
JSXFH6-14	1 1/2	266	184
JSXFH8-24		291	209
JSXFH8-20	2	306	224
JSXFH10-20		333	251

The dimensions indicate the values after screw tightening.

Replacement Parts (SMARTVENT Type/JSXF)

Port size	Model	Replacement part number			
		Main valve assembly (Main valve + O-ring)	Sub-valve assembly (Sub-valve + O-ring)	Silencer ①	Silencer ②
06	JSXF(E, F, H)□-06□-5P□B-(S)	JSXF-06B-KT	—	Rc, G thread: AN20-02 NPT thread: AN20-N02	—
10	JSXF(E, F, H)□-10□-5P□B-(S)	JSXF-10B-KT	—		
14	JSXF(E, F)□-14□-5P□B-(S)	JSXF-14B-KT	JSXF-14B-KT2	Rc, G thread: AN20-02 NPT thread: AN20-N02	Rc, G thread: AN30-03 NPT thread: AN30-N03
	JSXFH□-14□-5P□B-(S)	JSXF-14B-1-KT			
20	JSXFH□-20□-5P□B-(S)	JSXF-20B-KT	JSXF-14B-KT2		

Disassembly/Assembly Procedure

⚠ Caution

- Before disassembly, be sure to turn OFF the power supply and pressure supply, and then release the residual pressure.

Disassembly

- Loosen the hexagon bolts, and remove the bonnet assembly (bonnet), O-ring, and the main valve (sub-valve).

Assembly

- Attach the main valve (sub-valve) to the body. The main valve (sub-valve) has a predetermined mounting direction.

Assemble the valve referring to Fig. 1.

If the valve is assembled incorrectly, it can cause a malfunction.

- Mount the O-ring to the body groove. (See Fig. 2.) After mounting the O-ring, check to make sure that the O-ring is fitted properly into the groove. If it is not in the groove, external leakage and/or operation failure may occur.
- Attach the bonnet assembly (bonnet) to the body.
- Tighten the hexagon bolts (hexagon socket head cap screws) diagonally.

(See Table 1 for the tightening torque.)

Table 1. Proper Tightening Torque [N·m]

JSXF□-06□	M8	12.5 to 13.8
JSXF□-10□	M8	12.5 to 13.8
JSXF□-14□	Main valve	M6 5.2 to 5.7
	Sub-valve	M4 1.5 to 1.7
JSXF□-20□	Main valve	M8 12.5 to 13.8
	Sub-valve	M4 1.5 to 1.7

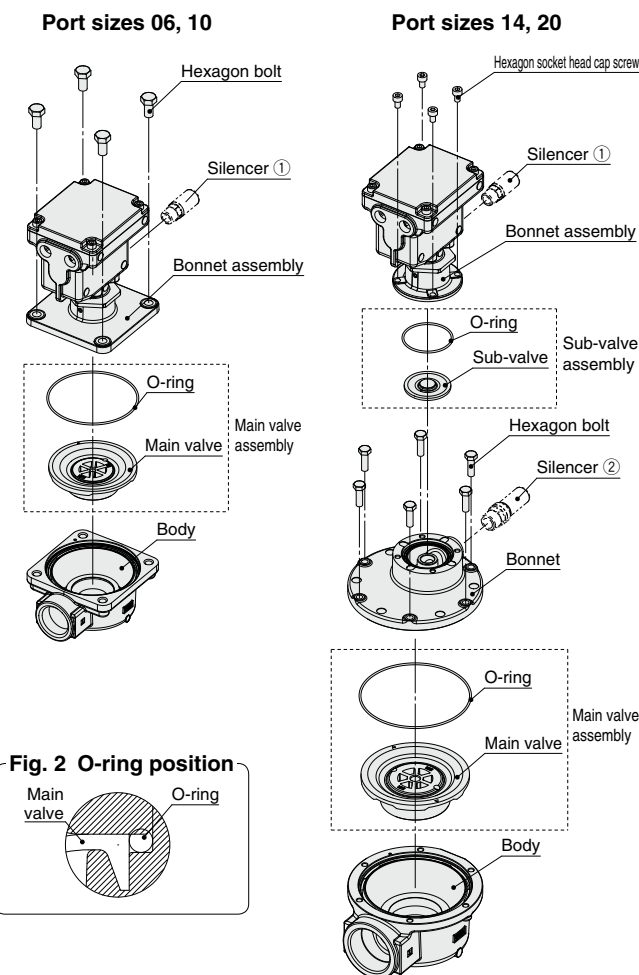
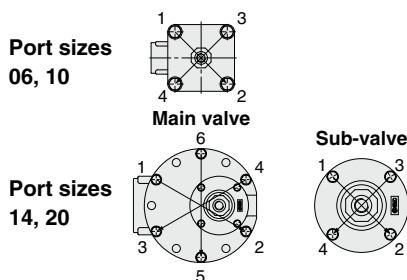


Fig. 2 O-ring position

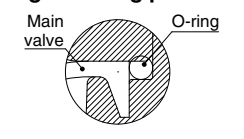


Fig. 1 Valve position

