

Improved Water Resistance Zero Differential Pressure Type Pilot Operated 2-Port Solenoid Valve



Protection degree: IP68*

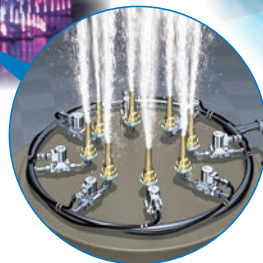
* Water resistance confirmed at a depth of 2 m for 24 hours

IP68

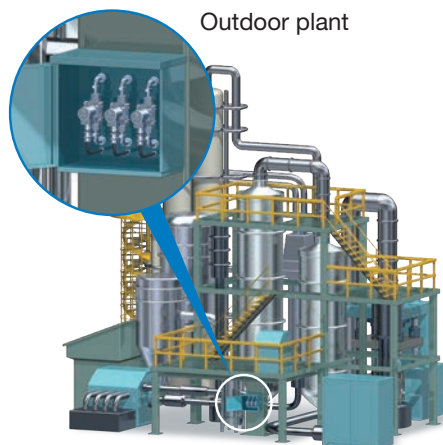
Dustproof and water-resistant specifications

- Built-in metal cable gland
- Weather-resistant heavy-duty cable entry
 - * Reduced risk of wire breakage and insulation degradation
- Body material: Stainless steel, Brass
- Flow rate characteristics [Cv]: 5.3*
- Apparent power [VA]: 9.5*

* For JSXZ41-X300



Application Examples



* Please use the product in accordance with the specifications provided in the catalogs/operation manuals.
It is your responsibility to check the suitability for your workpiece and equipment.

JSXZ-X300



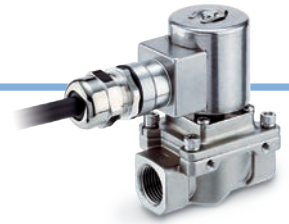
25-E805

How to Order

JSXZ 4 1 - S N 04 R - 5 FS-X300

Zero Differential Pressure
Type Pilot Operated

Cable entry



① Size

Symbol	Size
4	40
5	50
6	60

② Valve type

Symbol	Valve type
1	N.C.

③ Body material

Symbol	Body material
C	Brass
S	Stainless steel

④ Seal material

Symbol	Seal material
N	NBR
F	FKM

⑤ Port size

Symbol	Port size	Size		
		40	50	60
04	1/2	●	—	—
06	3/4	—	●	—
10	1	—	—	●

⑥ Thread type

Symbol	Thread type
R	Rc
N	NPT
F	G

⑦ Rated voltage

Symbol	Rated voltage
1	100 VAC
2	200 VAC
5	24 VDC
B	24 VAC

Flow Rate Characteristics

Size	Body material	Port size	Orifice diameter [mmø]	Flow rate characteristics*1						Max. operating pressure differential [MPa]	Model	Weight [g]
				Air				Water, Oil				
				C [dm³/(s·bar)]	b	Cv	Effective area [mm²]	Kv	Conversion Cv			
40	Brass/Stainless steel	1/2	15	23	0.34	6.0	—	4.6	5.3	1.0	JSXZ41-C□04	1080
50	Brass/Stainless steel	3/4	20	36	0.26	9.4		7.8	9.2		JSXZ51-C□06	1460
60	Brass/Stainless steel	1	25	—				185	8.7		10.2	JSXZ61-C□10

*1 The flow rate characteristics of this product vary.

Common Specifications

Size			40	50	60
Valve specifications	Body material		Brass, Stainless steel		
	Valve construction		Pilot operated diaphragm		
	Valve type		Normally closed (N.C.)		
	Fluid and fluid temperature	Air*1	-10 to 60°C		
		Water, Oil	Water: 1 to 60°C (No freezing), Oil: -5 to 60°C (Kinematic viscosity: 50 mm ² /s or less)		
	Withstand pressure		2 MPa		
	Max. system pressure		1 MPa		
	Ambient temperature		-20 to 60°C		
	Valve leakage*2/ External leakage*2	Air	1 cm ³ /min (ANR) or less		
		Water, Oil	0.1 cm ³ /min or less		
	Enclosure*3		IP68		
	Standards		CE/UKCA		
Coil specifications	Operating environment		Location without the presence of corrosive gases or explosive gases		
	Seal material		NBR, FKM		
	Rated voltage	AC	24 V, 100 V, 200 V		
		DC	24 V		
	Allowable voltage fluctuation		±10% of the rated voltage		
	Allowable leakage voltage	AC	5% or less of the rated voltage		
		DC	2% or less of the rated voltage		
	Apparent power*4, 5	AC	9.5 VA	16 VA	
	Power consumption*4	DC	8 W	13 W	
	Temperature rise*6	AC	70°C	80°C	80°C
		DC	65°C	75°C	75°C

*1 Dew point temperature: -10°C or less.

*2 Leakage: The value at a differential pressure of 0.01 MPa or higher and an ambient temperature of 20°C.

*3 Water resistance confirmed at a depth of 2 m for 24 hours

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

*5 There is no difference in the frequency and the inrush and energized apparent power, since a rectifying circuit is used in the AC.

*6 Temperature rise: The value at an ambient temperature of 20°C and when the rated voltage is applied. Use this value as a reference as the actual value varies depending on the ambient environment.

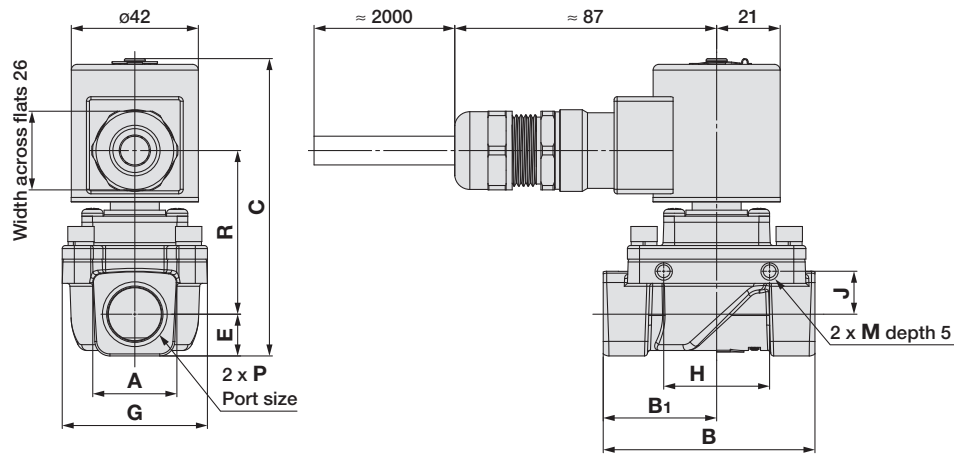
Be sure to read the Specific Product Precautions before handling the product.



When the differential pressure is less than 0.01 MPa, operation may become unstable. Please contact SMC in case of low-flow operation.

Improved Water Resistance
Zero Differential Pressure Type
Pilot Operated 2-Port Solenoid Valve **JSXZ-X300**

Dimensions: JSXZ**40, 50, 60** Port Size **1/2, 3/4, 1** Body Material **Stainless steel, Brass**



[mm]

Size	Port size P	A	B	B ₁	C	E	G	H	J	M	R
40	1/2	28	70	37.5	98.5	13.8	48	35	14.2	M5	54.3
50	3/4	33.5	71	38.5	104.6	16.7	62	33	15.2	M6	57.5
60	1	42	95	49.5	110.6	19.8	66	37	17.2	M6	60.4



JSXZ-X300/Specific Product Precautions

Operating Environment

⚠ Warning

Do not use the product in locations such as those described below.

1. Locations with atmosphere in which water vapor is present or locations in which corrosive fluids (chemicals), or sea water, may come into contact with the product

While this product has been tested and confirmed to be water-resistant at a depth of 2 m for 24 hours, appropriate protective measures must be taken in environments where it is exposed to water for extended periods. Such water may enter through microscopic gaps in the product's external surfaces, resulting in fire damage or short-circuiting of the solenoid valve coils. If installing the product in close proximity to equipment such as machine tools, processing machines, etc., which use large amounts of liquids or oils, be sure to confirm that liquid dispersal or spatter from the peripheral equipment does not come into contact with the product.

Wiring

⚠ Caution

1. Handling of cables

Pulling, suspending, or applying excessive force to the cable may cause internal damage or wire breakage. When using the products, comply with the specified minimum bending radius and avoid excessive bending, sharp bends, or sudden flexing. Repeated bending at the same point or movement involving twisting will significantly reduce the service life of the cable.

Always ensure that the cable is not subjected to undue tension or unnatural bends, and use it with proper support and sufficient slack. (Minimum bending radius: 100 mm)

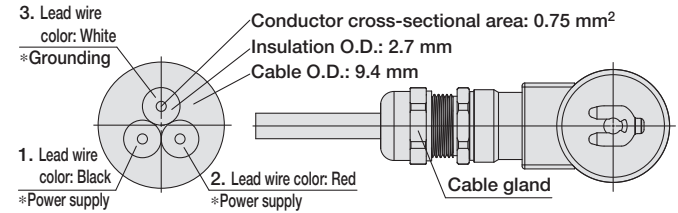
2. Handling of cable glands

The cable gland threads are tightened to the specific torque to ensure reliable waterproof performance.

Do not loosen or overtighten the threaded part, as this may compromise the waterproof performance.

Electrical Connections

Heavy-duty cable: 2PNCT

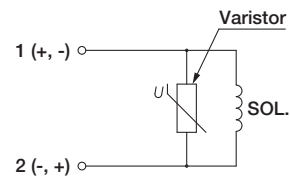


Electrical Circuits

⚠ Caution

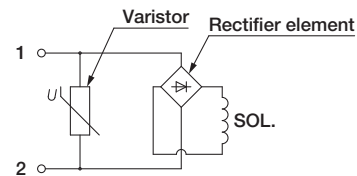
1. DC circuit

A surge voltage protection circuit is provided as standard.



2. AC circuit

A surge voltage protection circuit is provided as standard.



⚠ Safety Instructions Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.