IS10 Series



16% lighter Weight: 62 g *Previous type 74 g Compared with IS1000

11% smaller Overall height: 52 mm *Previous type 58.5 mm

Compared with IS1000

■100 V AC/DC specifications

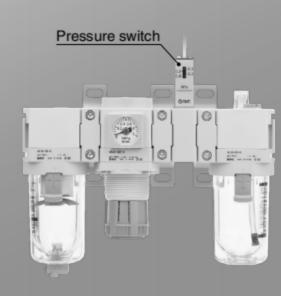
Set pressure range **0.1** to **0.4** MPa

■ Service life: 5 million cycles



RoHS

Can be connected to Modular type F.R.L. units.



ISE80 PS ISA3

PSE

ISA2

ISE35

ZSE20 ISE20

ZSE30 ISE30

ZSE40 ISE40

ZSE10 ISE10

ISE70

ZSE80

IS

ISG

ZSM1

Specifications

Model	1040.04		
Model	IS10-01		
Fluid	Air/Inert gas		
Proof pressure	1.0 MPa		
Max. operating pressure	0.7 MPa		
Set pressure range	0.1 to 0.4 MPa Option: 0.1 to 0.6 MPa		
Ambient and fluid temperature	-5 to 60°C (No freezing)		
Contacts	1a		
Error of scale	±0.05 MPa or less		
Hysteresis	Fixed 0.08 MPa or less		
Repeatability	±0.05 MPa or less		
Wiring specifications	Grommet, Lead wire length: 0.5 m Option: 3 m, 5 m		
Enclosure	Equivalent to IP40		
Port size	1/8		
Weight	62 g		

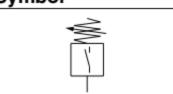
Switch Characteristics

Max. contact capacity	AC 2 VA, DC 2 W		
Voltage AC/DC	24 V or less	48 V	100 V
Max. operating current and range	50 mA	40 mA	20 mA

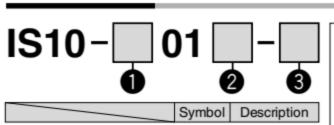
Electrical Circuit

Up to 100 V AC/DC Reed switch

Symbol



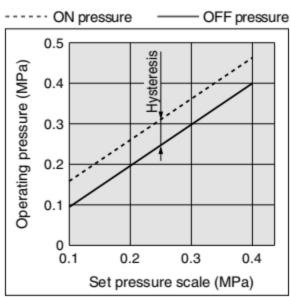
How to Order



Ω	Ω		Throad type	Nil	R
U	Thread type			N	NPT
	+				
9	Seal			Nil	None
2				S	With seal
+					
	а		Set pressure	Nil	0.1 to 0.4 MPa
		range	6 Note1)	0.1 to 0.6 MPa	

				+		
③	Semi-standard		Set pressure	Nil	0.1 to 0.4 MPa	
		а	range	6 Note1)	0.1 to 0.6 MPa	
			+			
		d d	Lead wire	Nil	0.5 m	
			length	L	3 m	
				Z	5 m	
		+				
		c	Scale plate pressure unit	Nil	MPa	
			pressure unit	P Note2)	Both MPa and psi	

Set Pressure Range

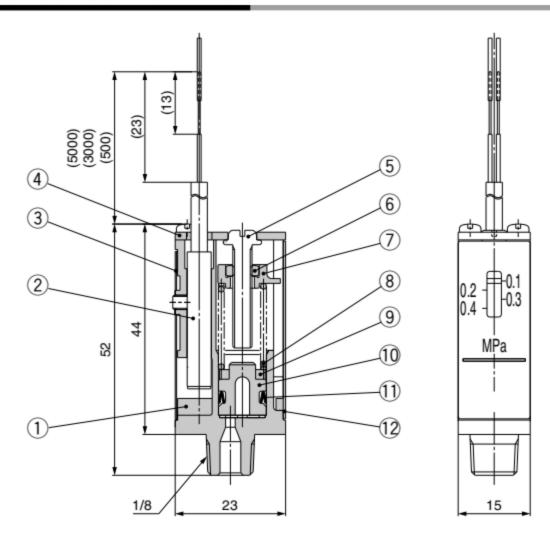


Semi-standard: Select one option each in a through c. Place them in alphanumerical

Example) IS10-N01-6PZ

Note 1) Set pressure range of 6P(L, Z) is 0.2 to 0.6 MPa (30 to 90 psi).





Component Parts

component i arto			
No.	Description	Material	
1	Body	ZDC	
2	Switch assembly	_	
3	Shield plate	Steel sheet	
4	Cover	Steel sheet	
5	Adjusting screw	Brass	
6	Hexagon nut	Brass	
7	Indicator	PBT	
8	Spring	Stainless steel	
9	Magnet	_	
10	Piston	POM	
11	Seal piston	NBR	
12	Scale plate	PC	

Wiring

≜Warning

 Connect load before connecting with power source.

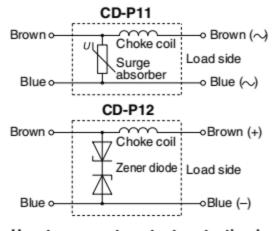
The switch will break instantly if no load is connected.

 Make the wiring length as short as possible. When the load which is operated by the pressure switch is an inductive load, or the lead wire is 5 m or longer, use the contact protection box shown in the table below.

Otherwise, damage to the switch can result.

Part no.	Voltage	Lead wire length
CD-P11	100 VAC	Switch side: 0.5 m
CD-P12	24 VDC	Load side: 0.5 m

Internal circuit of contact protection box



How to connect contact protection box
 Connect the lead wires from the body and
the contact protective have side indicated.

the contact protective box side indicated "SWITCH." Make the lead wire as short as possible, within 1 m.

3. Dimensions of lead wire

Enclosure: Ø 3.4 Insulator: Ø 1.1 Conductor: Ø 0.64

For details, refer to the operation manual.

Mounting

⚠ Warning

- When handling the product, hold the body and do not apply tensile stress to the power supply cable.
 Otherwise, damage may occur to the product.
- 2. Avoid repeatedly bending or stretching the lead wire. Wiring which applies repeated bending and tensile stress to the lead wire can break the circuit. If the lead wire is damaged, causing operation failure, replace the product with a new one.
- Do not drop or bump the product when handling the product.
- Apply a wrench to the bottom of the product when screwing.

Turning it by applying a wrench on the top of the main body may cause damage to the product. Recommended tightening torque: 7 to 9 N·m





Mounting direction is available in either horizontal or perpendicular.

Operating Environment

⚠ Warning

- Avoid using a switch in a magnetic environment. It may cause a malfunction.
- Do not use in such an environment, where water or oil is splashed.

Since it is the open type construction, if water or oil make an ingress into the internal parts, the electric circuit will be corroded and may result in a malfunction or damage.

3. Avoid vibration.

Vibration may cause a malfunction or may cause setting to be incorrect.

Pressure Source

∆Warning

 Operating fluids are either air or inert gas exclusively.

Never use other fluids. Never use in an environment where flammable fluid or gas is used. Since this is not an explosion-proof construction, it may lead to an explosive disaster.

- Not applicable to corrosive gas and liquid.
 Otherwise, damage to the body or liquid leakage can result.
- Avoid use in vacuum applications. Switch may be imploded.
- 4. This product (IS10 series) uses a reed switch. If the chattering of the output signal is a problem, choose a solid state type pressure switch or adjust by PLC.

Pressure Setting

.Marning

 Set within the display pressure range of the scale plate.

. Caution

- The pressure can be adjusted by rotating the adjustment screw. The red indicator goes up and down according to the adjustment.
- Rotate the screw clockwise for high pressure.

 2. Use a screwdriver of a size suitable for
- the groove of the adjustment screw.
- Scale of switching set display is the set value at the pressure drop.
- 4. The ON signal is output through the pressure set on the scale plate, to which the hysteresis is added for detecting the ON-pressure signal.
- The pressure displayed on the scale plate is a guideline only.

Measure the accurate pressure with the pressure gauge.