Pneumatic Pressure Switch **IS3000 Series**

CE

Model

Can be used for micro load, around 10 mA e.g. relays, programmable controllers, etc.

Easy electrical wiring

Wide space for wiring. Fixed wiring possible with G $^{1\!/\!2}$ connector.

Calibration range

0.1 to 0.7 MPa

Frequency: 1 cycle/sec Service life: 10 million cycles

With indicator light





IS3100 (Gasket piping)

IS3000-02 (Rc ¹/4 thread)





IS3110 (Gasket piping)

IS3010-02 (Rc ¹/₄ thread)





Model	Piping method	Micro switch type	Min. applicable load	
IS3000-02	Rc 1/4 thread	Oteradend	5 VDC 160 mA	
IS3100	Gasket piping	Standard		
IS3010-02	Rc 1/4 thread	Missa Is ad	5 VDO 1 1	
IS3110	Gasket piping	Micro load	5 VDC 1 mA	

Specifications

Fluid	Air/Inert gas	
Proof pressure	1.0 MPa	
Max. operating pressure	0.8 MPa	
Pressure adjustment range	0.1 to 0.7 MPa	
Ambient and fluid temperature	-5 to 60°C (No freezing)	
Contacts	1ab	
Error of scale	±0.1 MPa	
Hysteresis	0.05 MPa or less	
Repeatability	±0.05 MPa	
Enclosure	Equivalent to IP40	
Weight	0.15 kg	

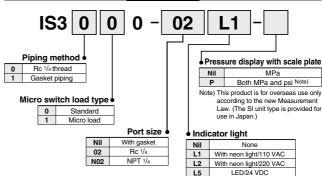
Micro Switch Ratings

Model	IS3100						IS3110			
	Non inductive (A)			Inductive load (A)			Non inductive (A)			
Load	Load re	sistance	Light	t load	Inducti	ve load	d Motor load		Load resistance	
Rated voltage (V)	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.
125 AC	5		1.5	0.7	3		2.5	1.3	0.1	
250 AC	3		1	0.5	2		1.5	0.8	_	
30 DC	4		2		:	3		3	0	.1
125 DC	0.4		0.	05	0.4		0.05		-	

Insulation resistance: 100 $\mbox{M}\Omega$ or more at 500 VDC by megameter

Voltage resistance: 1500 VAC, 50/60 Hz for 1 min. (When using switch with neon light: 1000 VAC for 1 min.)

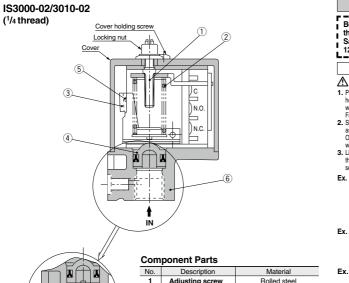
How to Order

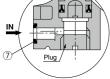


Courtesy of Steven Engineering, Inc - (800) 258-9200 - sales@steveneng.com - www.stevenengineering.com

Pneumatic Pressure Switch **IS3000** Series

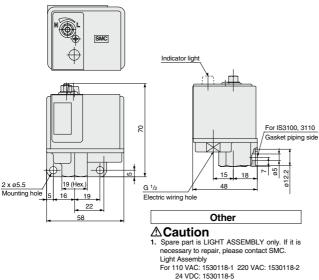
Construction





No.	Description	Material			
1	Adjusting screw	Rolled steel			
2	Setting spring	Rolled steel			
3	Lever	Rolled steel plate			
4	Piston	Polyacetal			
5	Micro switch				
6	Bottom cover	Aluminum die-cast			
7*	O-ring	NBR			
* Only for gasket mounting type					

Dimensions



Able to convert into L1, L2, L5 by changing each light assembly.

A precautions Image: Series of the series of th				
the products. Refer to back page 50 for Safety Instructions and pages 11 and 12 for Pressure Switch Precautions.	A Precautions			
Image: Second secon	the products. Refer to back page 50 for Safety Instructions and pages 11 and			
A Warning				
 1. Perform the wing filter removing the locking nut, cover shading screw, and cover. Be careful not to put the internal wing in contact with any drive section, such as the lever. Failure to do so may cause a malinition. 2. Since the light entiting diode (LED) is used for the light assembly for 24 VDC, there are 2 terminals and polarity. One is "4" for eld ad wire and the other is "-1" to black dad wire. Light will not light up if wired incorrectly. 2. Light asylor 24 VDC has 3 mod or current leakage. Correct the LED directly to the power supply if the input of the FLG sees the switch as closed at all times due to leakage. Ex. 1) When using contact "a" only or "a&b" contacts the LED directly to the power supply if the input of the FLG sees the switch as closed at all times due to leakage. Ex. 2) When using contact "b" only where some supply if the input of the FLG sees the switch as closed at all times due to leakage. Ex. 3) where the indicator light per the following: 2. Please put the enclosed seal of "LAMP LIGHTS WHEN PRESSURE ILSES" on the equipment where it is easy to see. 3. Thread using for the terminal is M3. Mounting/Piping Analytement cannot be made, since the adjusting screw is on the top of the body. 1. Sum the adjusting screw is on the top of the body. 1. Sum the adjusting screw is on the cover to set the pressure with a flat head screwdrive: Fix the screw with locking. If will be the setting value by turning to "-" (-1) side. Decrease the setting value by turning to "-" (-1) side. 				
 wire light entiting doe (LED) is used for the light entities due to leakage. Connect the LED directly to the power supply if the input of the PLC sees the switch as doed at all times due to leakage. Ex. 1) When using contact "a" only or "a&b" contacts the LED directly to the power supply if the input of the PLC sees the switch as doed at all times due to leakage. Ex. 2) When using contact "b" only the sont entities due to leakage. Ex. 3) Used the input of the PLC sets the light with endicator light wire the indicator light per the following: The case of using a switch with indicator light, wire the indicator light per the following: Thread using for the terminal is M3. Is Allow the space required for maintenance. Otherwise, maintenance or pressure adjustment cannot be made, since the adjusting screw is on the top of the body. Mounting/Piping Allow the space required for maintenance. Otherwise, maintenance or pressure adjusting is possible in either horizontal or vertical orientations. 	1. Perform the wiring after removing the locking nut, cover	-		
 assembly for 24 VDC, there are 2 terminals and polarity one is "- for black load wire. Light will not light up twied incorredy. 3. Light assy for 24 VDC has 3 mA d current leakage. Connect the LED dreity to the power supply if the input of the PLC sees the switch as dosed at all times due to leakage. Ex. 1) When using contact "a" only or "a&b" contacts Ex. 2) When using contact "b" only Ex. 2) When using contact "b" only Ex. 3) Upten using contact "b" only Ex. 4) When using contact "b" only Ex. 5) When using contact "b" only Ex. 6) When using contact "b" only Ex. 7) When using contact "b" only Ex. 8) Upten Upter the following: Ex. 9) Upten Upter the sease of a safety pressure Ex. 9) Upten Upter the sease of a safety PICSURE Ex. 9) Upter the enclosed seal of "LAMP GOES OUT WHEN PRESSURE RISES." on the equipment where it is easy to see. Thread using the terminal is M3. Mounting/Piping A claution Allow the space required for maintenance. Otherwise, maintenance or pressure adjustment cannot be made, since the adjusting is possible in either horizontal or vertical orientations. Pressure Setting A Caution Turm the adjusting screw on the cover to set the pressure with a fat head screwdrive: Fix the screw with locking nut after adjusting, Hysteresis is a fixed vaue. Increase the setting value by turning to "-" (1) side. Decrease the setting value by turning to "-" (1) side. 	wiring in contact with any drive section, such as the lever.	ISE40		
wire. Light will not light up if wired incorredly. S. Light asy for 24 VC has 3 and 6 current leakage. Connect the LED directly to the power supply if the input of the PLC sees the switch as closed at all times due to leakage. Ex. 1) When using contact "a" only or "a&b" contacts F. 2) When using contact "a" only or "a&b" contacts Ex. 2) When using contact "b" only where some Ex. 2) When using contact "b" only where some Ex. 2) When using contact "b" only Ex. 2) When using contact "b" only Contact "b" only Contact "b" only Contact "b" only Contact "b" only SESS Ex. 3) Contact "b" only SESS SE	assembly for 24 VDC, there are 2 terminals and polarity.			
sees the switch as closed at all times due to leakage. Ex. 1) When using contact "a' only or "a&b" contacts	wire. Light will not light up if wired incorrectly.	ISE70		
PS ISA3 ISA2 ISA3 ISA2 ISA3 ISA2 ISA3 ISA2 ISA3 ISA2 ISA3 ISA2 ISA3 ISA2 ISA3 ISA2 ISA3 ISA5 IS	sees the switch as closed at all times due to leakage.			
Ex. 2) When using contact 'b' only INAP 5 ON INC		PS		
Ex. 2) When using contact 'b' only if the probability of the probabil	C N.O. CB LAMP IS OFF WHEN PRESSURE	ISA3		
Ex. 3) Control of the product of the produ	C N.C.	1542		
Ex. 3) Control of the product of the produ	Light			
A Caution In the case of using a switch with indicator light, wire the indicator light per the following: Please put the enclosed seal of "LAMP GOES OUT WHEN PRESSURE RISES." on the equipment where it is easy to see. Thread using for the terminal is M3. Mounting/Piping A Caution Allow the space required for maintenance. Otherwise, maintenance or pressure adjustment cannot be made, since the adjusting screw is on the top of the body. A Mounting/Piping A Caution Thread using is possible in either horizontal or vertical orientations. Pressure Setting A Caution Turn the adjusting screw on the cover to set the pressure with a fat head screwdrive: Fix the screw with locking nut after adjusting. Hysteresis is a fixed vaue. Increase the setting value by turning to '-'(1) side. Decrease the setting value by turning to '-'(1) side.	CP_ WHEN PRESSURE	ISE35		
Caution In the case of using a switch with indicator light, wire the indicator light per the following: Please put the enclosed seal of "LAMP GOES OUT WHEN PRESSURE RISES." on the equipment where it is easy to see. Thread using for the terminal is M3. Mounting/Piping Caution 1. Allow the space required for maintenance. Otherwise, maintenance or pressure adjustment cannot be made, since the adjusting screw is on the top of the body. 2. Mounting is possible in either horizontal or vertical orientations. Pressure Setting A Caution 1. Turn the adjusting screw on the cover to set the pressure with a fat head screwdrive: Fix the screw with locking nut after adjusting. Hysteresis is a fixed vaue. Increase the setting value by turning to "-" (1) side. Decrease the setting value by turning to "-" (1) side.	í ,‴⊡Ĥ	PSE		
In the case of using a switch with indicator light, wire the indicator light per the following: Please put the enclosed seal of "LAMP LIGHTS WHEN PRESSURE RISES" on "LAMP GOES OUT WHEN PRESSURE RISES" on the equipment where it is easy to see. Thread using for the terminal is M3. Mounting/Piping A Caution I. Allow the space required for maintenance. Otherwise, maintenance or pressure adjustment cannot be made, since the adjusting screw is on the top of the body. Mounting is possible in either horizontal or vertical orientations. Pressure Setting A Caution I. Turn the adjusting screw on the cover to set the pressure with a flat head screwdriver. Fix the screw with locking nut after adjusting. Hysteresis is a fixed vaue. Increase the setting value by turning to "-" (L) side.	c N.O.	IS		
2. Please put the enclosed seal of "LAMP LIGHTS WHEN PRESSURE RISES." or LAMP GOES OUT WHEN PRESSURE RISES." on the equipment where it is easy to see. 3. Thread using for the terminal is M3. Mounting/Piping A Caution 1. Allow the space required for maintenance. Otherwise, maintenance or pressure adjusting screw is on the top of the body. 2. Mounting is possible in either horizontal or vertical orientations. Pressure Setting A Caution 1. Turn the adjusting screw on the cover to set the pressure with a flat head screwdriver. Fix the screw with locking nut after adjusting. Hysteresis is a fixed value. Increase the setting value by turning to "+" (H) side. Decrease the setting value by turning to "+" (H) side.	1. In the case of using a switch with indicator light wire the indicator light per the following:	ISG		
equipment where it is easy to see. 3. Thread using for the terminal is M3. Mounting/Piping Caution 1. Allow the space required for maintenance. Otherwise, maintenance or pressure adjustment cannot be made, since the adjusting screw is on the top of the body. 2. Mounting is possible in either horizontal or vertical orientations. Pressure Setting Caution 1. Turn the adjusting screw on the cover to set the pressure with a flat head screwdriver. Fix the screw with locking nut after adjusting. Hysteresis is a fixed vaue. Increase the setting value by turning to "+" (+) side. Decrease the setting value by turning to "-" (L) side.	 Please put the enclosed seal of "LAMP LIGHTS WHEN PRESSURE RISES," or "LAMP GOES 			
Mounting/Piping ▲ Caution 1. Allow the space required for maintenance. Otherwise, maintenance or pressure adjustment cannot be made, since the adjusting screw is on the top of the body. 2. Mounting is possible in either horizontal or vertical orientations. Pressure Setting ▲ Caution 1. Turn the adjusting screw on the cover to set the pressure with a flat head screwdriver. Fix the screw with locking nut after adjusting. Hysteresis is a fixed vaue. Increase the setting value by turning to "+" (+) side. Decrease the setting value by turning to "-" (L) side.	equipment where it is easy to see.	ZSM1		
A Caution A Caution In Allow the space required for maintenance. Otherwise, maintenance or pressure adjustment cannot be made, since the adjusting screw is on the top of the body. S. Mounting is possible in either horizontal or vertical orientations. Pressure Setting A Caution I. Turn the adjusting screw on the cover to set the pressure with a flat head screwdriver. Fix the screw with locking nut after adjusting. Hysteresis is a fixed vaue. Increase the setting value by turning to "+" (H) side. Decrease the setting value by turning to "-" (L) side.				
 Allow the space required for maintenance. Otherwise, maintenance or pressure adjusting screw is on the top of the body. Mounting is possible in either horizontal or vertical orientations. Pressure Setting A Caution 1. Turn the adjusting screw on the cover to set the pressure with a flat head screwdriver. Fix the screw with locking nut after adjusting. Hysteresis is a fixed vaue. Increase the setting value by turning to "+" (H) side. Decrease the setting value by turning to "-" (L) side.				
▲ Caution 1. Turn the adjusting screw on the cover to set the pressure with a flat head screwdriver. Fix the screw with locking nut after adjusting. Hysteresis is a fixed value. Increase the setting value by turning to "+" (H) side. Decrease the setting value by turning to "-" (L) side.	 Allow the space required for maintenance. Otherwise, maintenance or pressure adjustment cannot be made, since the adjusting screw is on the top of the body. Mounting is possible in either horizontal or 			
 Turn the adjusting screw on the cover to set the pressure with a flat head screwdriver. Fix the screw with locking nut after adjusting. Hysteresis is a fixed value. Increase the setting value by turning to "+" (H) side. Decrease the setting value by turning to "-" (L) side. 	Pressure Setting			
2.Use a flat head screwdriver to set the	 Turn the adjusting screw on the cover to set the pressure with a flat head screwdriver. Fix the screw with locking nut after adjusting. Hysteresis is a fixed value. Increase the setting value by turning to "+" (H) side. Decrease the setting value by turning to "-" (L) side. 			

- 2.Use a flat head screwdriver to set the pressure. Then, lock it in place with the lock nut. Otherwise the set pressure will change.
- 3. The hysteresis (the ON-OFF range) is fixed. 4. Set pressure scale is the value when pressure increases.

Operating Environment

∆Warning

- 1. Do not use in an environment, where water or oil is splashed. Because it is the open type construction. If water or oil were to make an ingress, the electrical circuit would be corroded and result in a malfunction or damage.
- 2. Operating fluids are either air or inert gas exclusively. Never use liquids. 3. Never use in an environment where flam-
- mable fluid or gas is used.
- Use of this product near flammable materials could cause an explosive situation. This product is not explosion-proof.

SMC Courtesy of Steven Engineering, Inc - (800) 258-9200 - sales@steveneng.com - www.stevenengineering.com