

2-Color Display Digital Pressure Switch For Air

Series ISE70



How to Order

1 MPa

ISE70 - 02 - 43 - M

Piping

02	Rc1/4
N02	NPT1/4
F02	G1/4 (ISO1179)

Output

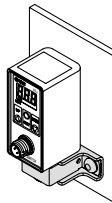
27	2 settings NPN open collector 2 outputs ((Pin no.: 2, 4)
43	Fixed setting: NPN open collector 1 output (Pin no.: 4) + PNP open collector 1 output (Pin no.: 2)
65	PNP open collector 1 output (Pin no.: 4)
67	2 settings PNP open collector 2 outputs (Pin no.: 2, 4)

Display unit

Nil	With unit display switching function
M	Fixed SI unit ^{Note)}
P	Pressure unit: psi (Initial value) With unit display switching function

Note) Fixed unit: MPa

Option 2

Nil	None
A	With bracket  Note) Mounting screws are not included.

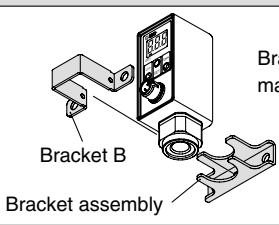
Option 1

Nil	None
S	Lead wire with M12 connector (5 m), straight
L	Lead wire with M12 connector (5 m), right-angled



Optional Part No.

When optional parts are required separately, use the following part numbers to place an order.

Option	Part no.	Note
Bracket	ZS-31-A	 <p>Bracket B and the bracket assembly make up one set. Note) Mounting screws are not included.</p>
Lead wire with M12 connector, straight	ZS-31-B	Lead wire length: 5 m
Lead wire with M12 connector, right-angled	ZS-31-C	Lead wire length: 5 m

Specifications

Model		ISE70
Rated pressure range		0 to 1 MPa
Set pressure range		-0.1 to 1 MPa
Withstand pressure		1.5 MPa
Set pressure resolution		0.01 MPa
Applicable fluid		Air, Non-corrosive gas, Non-flammable gas
Power supply voltage		12 to 24 VDC±10%, Ripple (p-p) 10% or less (with power supply polarity protection)
Current consumption		55 mA or less (at no load)
Switch output		Output -27: 2 settings; NPN open collector 2 outputs (Pin no.: 2, 4) Output -43: Fixed setting; NPN open collector 1 output (Pin no.: 4) + PNP open collector 1 output (Pin no.: 2) ^{Note 1)} Output -65: PNP open collector 1 output (Pin no.: 4) Output -67: 2 settings; PNP open collector 2 outputs (Pin no.: 2, 4)
	Max. load current	80 mA
	Max. applied voltage	30 V (at NPN output)
	Residual voltage	1 V or less (with load current of 80 mA)
	Response time	2.5 ms (with anti-chattering function: 20 ms, 160 ms, 640 ms, 1000 ms, 2000 ms)
	Short circuit protection	With short circuit protection
Repeatability		±0.5%F.S. or less
Hysteresis	Hysteresis mode	Variable (0 or above)
	Window comparator mode	
Display		3-digit, 7-segment indicator, 2-color display (Red/Green) can be interlocked with the switch output, Sampling cycle: 5 times/1 s
Display accuracy		2%F.S.±1 digit or less (at 25°C±3°C)
Indication light		OUT1: Light up when output is turned ON. (Green) OUT2: Light up when output is turned ON. (Red: for output -27, -67)
Functions		Anti-chattering function, Unit display switching function, Zero-out function, Key lock function
Environmental resistance	Enclosure	IP67 ^{Note 2)}
	Fluid temperature range	0 to 50°C (with no freezing or condensation)
	Operating temperature range	Operating: 0 to 50°C, Stored: -10 to 60°C (with no freezing or condensation)
	Operating humidity range	Operating and stored: 35 to 85%RH (with no condensation)
	Withstand voltage	1000 VAC for 1 min. between live parts and case
	Insulation resistance	50 MΩ or more between live parts and case (at 500 VDC Mega)
	Vibration resistance	10 to 500 Hz, 1.5 mm or 98 m/s ² amplitude in X, Y, Z directions for 2 hours each (De-energized)
	Impact resistance	980 m/s ² in X, Y, Z directions 3 times each (De-energized)
Temperature characteristics (Based on 25°C: within operating temperature range)		±2%F.S. or less
Standards		CE Marking, UL/CSA (UL508) compliance
Wetted parts material		Fitting: C3604 (electroless nickel plated), Sensor port: PBT, Sensor pressure receiving area: Silicon, O-ring: NBR
Port size		02: Rc1/4, N02: NPT1/4, F02: G1/4 (ISO1179) ^{Note 3)}
Lead wire		Oilproof cable with M12 4-pin pre-wired connector, 4 cores, ø4, 5 m, Conductor O.D.: 0.72 mm, Insulator O.D.: 1.14 mm
Mass (Weight)		190 g (excluding the lead wire with M12 4-pin pre-wired connector)

Note 1) The NPN and PNP outputs function for a single set point.

Note 2) An FKM gasket is used for the product case seal. Refer to the back of page 727 for details.

Note 3) G1/4: Applicable to ISO1179-1

See the operating manual for information on how to set and on handling precautions.
(Refer to SMC website.)