

2-colour Display Digital Pressure Switch/For Air

Series **ISE70**



Features

- ➔ Integrated pressure switch for air
- ➔ Robust metal case construction
- ➔ IP67 waterproof design
- ➔ Removable cable
- ➔ Red / Green dual colour LED display
- ➔ NPN and PNP outputs available
- ➔ Can be operated in hysteresis or window comparison mode
- ➔ Mounting bracket available

How to Order



ISE70-02-43-S



Connector Pin Assignments

Output -43

1	Brown	DC (+)
2	White	OUT1 (PNP)
3	Blue	DC (-)
4	Black	OUT1 (NPN)

Output -65

1	Brown	DC (+)
2	White	NC
3	Blue	DC (-)
4	Black	OUT1 (PNP)

Piping
G1/4 (ISO1179)

Output

Option 1

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)

S	Lead wire with M12 connector (5m), straight
L	Lead wire with M12 connector (5m), right-angled

Accessories

When option 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 (spare)	ZS-31-B	Lead wire length: 5m
Lead wire with M12 connector, right-angled (spare)	ZS-31-C	Lead wire length: 5m

Specifications

		ISE70
Rated pressure range		0 to 1MPa
Set pressure range		-0.1 to 1MPa
Proof pressure		1.5MPa
Set pressure resolution		0.01MPa
Fluid		Air, Inert gas, Non-flammable gas
Power supply voltage		12 to 24 VDC, Ripple (p-p) 10% or less (with power supply polarity protection)
Current consumption		55 mA or less (at no load)
Switch output		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) ^{Note 1)}
	Max. load current	80 mA
	Max. applied voltage	30 V (with NPN output)
	Residual voltage	1 V or less (with load current of 80 mA)
	Response time	2.5 ms (Response time selections 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.
Hysteresis	Hysteresis mode	Adjustable (can be set from 0)
	Window comparator mode	
Display		3 digit, 7-segment indicator, 2-colour display (red and green) can be interlocked with the switch output, Sampling cycle: 5 times/s
Display accuracy		±2%F.S. ±1 digit or less (at 25 °C ±3 °C)
Indication light		Light up when output is ON (Green)
Functions		Anti-chattering function, Unit display switching function, Zero out function, Key lock function
Environmental resistance	Enclosure	IP67
	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 enclosure
Insulation resistance		50 MΩ or more between live parts and enclosure (at 500 VDC Mega)
Temperature characteristics (Based on 25°C: Operating temperature range)		±2%F.S. or less
Standard		Compliant with CE Marking and UL/CSA (UL508) standards
Wetted material		Fitting: C3602 (electroless nickel plated), Sensor port: PBT, Sensor pressure receiving area: silicon, O-ring: NBR
Port size		F02: G1/4 (ISO1179) ^{Note 2)}
Lead wire		Lead wire with M12 4-pin pre-wired connector (5 m)
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) G1/4: Applicable to ISO1179-1

Dimensions

The dimensions for ISE70 are common to ISE75 and ISE75H. Please see under ISE75 (following pages) for dimensions.

