


**ATEX Compliant**

# Digital Pressure Switch for Air

## Series 56-ISE70

CE  II 3G Ex nA II T5 X 0 °C ≤ Ta ≤ 50 °C  
II 3D tD A22 IP67 T53 °C X

### How to Order

**1MPa**

**56-ISE70-02-43-M**

ATEX category 3

Piping specifications

02	Rc 1/4
N02	NPT 1/4
F02	G 1/4 (ISO1179)

Output specifications

27	2 settings NPN open collector 2 outputs (Pin no.: 2, 4)
43	Fixed setting: (The pressure set point for switching the output signal is common to NPN and PNP.) NPN open collector 1 output (Pin no.: 4) + PNP open collector 1 output (Pin no.: 2)
65	Fixed setting PNP open collector 1 output (Pin no.: 4)
67	2 settings PNP open collector 2 outputs (Pin no.: 2, 4)

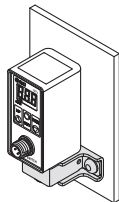
Unit specifications

—	With display unit switching function <sup>Note 1)</sup>
M	Fixed SI unit <sup>Note 2)</sup>
P	Pressure unit: psi (Initial value) With display unit switching function <sup>Note 1)</sup>

Note 1) Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan. (Initial value: MPa)

Note 2) Fixed unit: Mpa

Option 2

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

Option 1

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

### Specifications

Model	56-ISE70
Rated pressure range	0 to 1 MPa
Pressure display range/Set pressure range	−0.1 to 1 MPa
Withstand pressure	1.5 MPa
Pressure display resolution/Minimum unit setting	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)

Follow the instructions given below when handling the pressure switch.


- Operating temperature range is 0 to 50 °C
- Do not expose the pressure switch to heat radiation from a heat source located nearby. It can cause malfunction.
- Do not expose the pressure switch/connector/cable to vibration and impact. Otherwise it can cause damage or malfunction.
- Protect the product from direct sunlight or UV light using a suitable protective cover.
- Do not disconnect the M12 connector while energized.
- Use only an ATEX approved M12 connector.
- For cleaning this product, use a clean and damp cloth, to prevent the buildup of an electrostatic charge.
- Ground properly to prevent the buildup of an electrostatic charge.

All other specifications are the same as the standard products Series ISE70.  
For details, refer to the **WEB catalog** or Best Pneumatics No. 6.

**ATEX Compliant**

# Digital Pressure Switch for General Fluids

## Series 56-ISE75/75H

CE  II 3G Ex nA II T4 X -5 °C ≤ Ta ≤ 50 °C  
II 3D tD A22 IP67 T54 °C X

### How to Order

**10 MPa**

**15 MPa**

**56 - ISE75**    **56 - ISE75H**

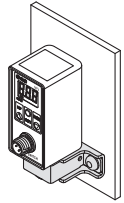
**02**    **02**

**43**    **43**

**M**    **M**

**Option 2**

—	None
A	With bracket



Note) Mounting screws are not included.

**Option 1**

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

**ATEX category 3**

**Piping specifications**

<b>02</b>	Rc 1/4
<b>N02</b>	NPT 1/4
<b>F02</b>	G 1/4 (ISO1179)

**Output specifications**

<b>27</b>	2 settings NPN open collector 2 outputs (Pin no.: 2, 4)
<b>43</b>	Fixed setting: (The pressure set point for switching the output signal is common to NPN and PNP.) NPN open collector 1 output (Pin no.: 4) + PNP open collector 1 output (Pin no.: 2)
<b>65</b>	Fixed setting PNP open collector 1 output (Pin no.: 4)
<b>67</b>	2 settings PNP open collector 2 outputs (Pin no.: 2, 4)

**Unit specifications**

—	With display unit switching function <sup>Note 1)</sup>
<b>M</b>	Fixed SI unit <sup>Note 2)</sup>
<b>P</b>	Pressure unit: psi (Initial value) With display unit switching function <sup>Note 1)</sup>

Note 1) Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan. (Initial value: MPa)

Note 2) Fixed unit: Mpa

### Specifications

Model	56-ISE75	56-ISE75H
Rated pressure range	0 to 10 MPa	0 to 15 MPa
Pressure display range/Set pressure range	0.4 to 10 MPa	0.5 to 15 MPa
Withstand pressure	30 MPa	45 MPa
Pressure display resolution/Minimum unit setting	0.1 MPa	
Applicable fluid	Fluid or gas that will not corrode SUS304, SUS430 and SUS630	
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)	

Follow the instructions given below when handling the pressure switch.

- Operating temperature range is - 5 to 50 °C
- Do not expose the pressure switch to heat radiation from a heat source located nearby. It can cause malfunction.
- Do not expose the pressure switch/connector/cable to vibration and impact. Otherwise it can cause damage or malfunction.
- Protect the product from direct sunlight or UV light using a suitable protective cover.
- Do not disconnect the M12 connector while energized.
- Use only an ATEX approved M12 connector.
- For cleaning this product, use a clean and damp cloth, to prevent the buildup of an electrostatic charge.
- Ground properly to prevent the buildup of an electrostatic charge.

All other specifications are the same as the standard products Series ISE75/ISE75H.  
For details, refer to **the WEB catalog** or Best Pneumatics No. 6.

**ATEX Compliant**

# Pressure Switch: Reed Switch Type

## Series 56-IS10



II 3 GD Ex Na II T5 Ta-5 °C to 60 °C T90 °C  
IP67 / IP40



For details about certified products conforming to international standards, visit us at [www.smcworld.com](http://www.smcworld.com).

**Long service life:  
5 million cycles**



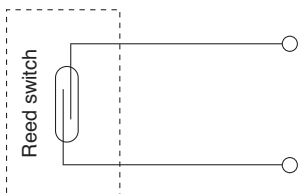
56-IS10

### Specifications

Model	56-IS10-01
Fluid	Air
Proof pressure	1.0 MPa
Max. operating pressure	0.7 MPa
Regulating pressure range (at OFF point)	0.1 to 0.4 / 0.1 to 0.6 MPa (semi-standard)
Hysteresis	0.08 MPa or less
Error of scale	± 0.05 MPa or less
Repeatability	± 0.05 MPa or less
Contacts	1a
Wiring specifications	Grommet, Lead wire length 0.5 m (Standard), Option: 3 m, 5 m
Enclosure	Equivalent to IP40
Ambient and fluid temperature	-5 to 60 °C (No freezing)
Port size	R 1/8
Weight	62 g

### Electrical Circuit

Up to 48 V AC/DC



### Switch Characteristics

Max. contact capacity	AC 2 VA, 2 W DC	
Voltage	≤ 24 VAC/DC or less	48 VAC/DC
Max. operating current	50 mA	40 mA

### How to Order

**56-IS10 - N 01 S -**

Atex  
Category 3

Therad size

-	R 1/8
N	NPT 1/8

Seal

-	None
S	With seal

Semi-standard

a	Set pressure range	-	0.1 to 0.4 MPa
		6 Note1)	0.1 to 0.6 MPa
b	Lead wire length	+	
		-	0.5 m
		L	3 m
c	Scale plate pressure unit	+	
		-	MPa
		P Note2)	Both MPa and psi

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

Note 2) This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)

### Operating Pressure Range

----- ON pressure — OFF pressure

