2-Color Display High-Precision Digital Pressure Switch

ZSE40A(F)/ISE40A Series

M8 connector type

Applicable fluid
Air, Non-corrosive gas, Non-flammable gas

Can copy to up to 10 switches simultaneously.
The settings of the master sensor (source of copy) can be copied to the slave sensors.
- Reducing setting labor
- Minimizing risk of mistakes in setting

Copy

Master sensor (source of copy)
Slave side
1 unit
2 units
10 units

Easy handling!
Raised rubber switch buttons for easy and comfortable operation

3-step setting
Push
Adjust to the set-value by the or button.
Push
Completion of setting

2-color display
See abnormal values at a glance.

ZSE40A(F)/ISE40A Series
RoHS
IP65

© SMC
Piping Variations

Series

<table>
<thead>
<tr>
<th>Series</th>
<th>ZSE40A (vacuum pressure)</th>
<th>ZSE40AF (compound pressure)</th>
<th>ISE40A (positive pressure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated pressure range</td>
<td>0.0 to –101.3 kPa</td>
<td>–100.0 to 100.0 kPa</td>
<td>–0.100 to 1.000 MPa</td>
</tr>
<tr>
<td>Set pressure range</td>
<td>10.0 to –105.0 kPa</td>
<td>–105.0 to 105.0 kPa</td>
<td>–0.105 to 1.050 MPa</td>
</tr>
<tr>
<td>Withstand pressure</td>
<td>500 kPa</td>
<td>500 kPa</td>
<td>1.5 MPa</td>
</tr>
<tr>
<td>Min. unit setting</td>
<td>0.1 kPa</td>
<td>0.1 kPa</td>
<td>0.001 MPa</td>
</tr>
</tbody>
</table>

Output

- NPN or PNP open collector 2 outputs (with copy function)
- NPN or PNP open collector 2 outputs + Analog output (voltage or current)/Auto-shift input

Piping

- R1/8, NPT1/8 (With M5 female thread), Rc1/8, G1/8, M5 female thread ø4, ø6 One-touch fitting

Secret code setting function

A function to prevent operation by anyone other than the designated operator while the keys are locked.

Power-saving function

The display can be turned off to save the power consumption. (Power consumption reduced by max. 20%)

Resolution conversion function

The flickering on the display can be eliminated.

MPa/kPa switching function

The indication unit for vacuum, compound pressure and positive pressure can be integrated into either MPa or kPa.
2-Color Display High-Precision Digital Pressure Switch

ZSE40A(F)/ISE40A Series

How to Order

Rated pressure range

For positive pressure
ISE40A –01 - X - M

For vacuum/compound pressure
ZSE40A –01 - Y - M

Piping specifications

Option 1

<table>
<thead>
<tr>
<th>Description</th>
<th>Symbol</th>
<th>Part no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bracket A</td>
<td>A</td>
<td>ZS-24-A</td>
</tr>
<tr>
<td>Bracket B</td>
<td>B</td>
<td>ZS-24-B</td>
</tr>
<tr>
<td>Bracket D</td>
<td>D</td>
<td>ZS-24-D</td>
</tr>
<tr>
<td>Panel mount adapter</td>
<td>E</td>
<td>ZS-35-C</td>
</tr>
<tr>
<td>Panel mount adapter + Front protective cover</td>
<td>F</td>
<td>ZS-35-G</td>
</tr>
</tbody>
</table>

Output specifications

X: NPN open collector 2 outputs (with copy function)
Y: PNP open collector 2 outputs (with copy function)
R: NPN open collector 2 outputs + Analog voltage/Auto-shift switching
T: PNP open collector 2 outputs + Analog voltage/Auto-shift switching
S: NPN open collector 2 outputs + Analog current/Auto-shift switching
V: PNP open collector 2 outputs + Analog current/Auto-shift switching

Unit specifications

M: With fixed PSI unit
P: With unit switching function

Note 1: Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.
Note 2: Unit: kPa, MPa

Some options are unavailable depending on the piping specifications. Refer to “Combination of piping specifications with option 1 and part numbers of options”.

Made to Order

Symbol: Nil - K

Specifications/Description

Rated pressure range

ISE40A –0.1 to 1.000 MPa
ZSE40A 0.0 to –101.3 kPa
–100.0 to 100 kPa

Piping specifications

R1/8
Rc1/8
G1/8

Bracket A
Bracket B
Bracket D
Panel mount adapter
Panel mount adapter + Front protective cover

Combination of piping specifications with option 1 and part numbers of options

Option 2

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Specifications/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Option 1

Bracket A
Bracket B
Bracket D
Panel mount adapter
Panel mount adapter + Front protective cover

Combination of piping specifications with option 1 and part numbers of options

Part no. | Option
---|---
ZS-24-A | Bracket A (Mounting screw M5 x 6L, M4 x 5L, 2 pcs. for each)
ZS-24-B | Bracket B (Mounting screw M5 x 6L, M4 x 5L, 2 pcs. for each)
ZS-24-D | Bracket D (Mounting screw M5 x 6L, M4 x 5L, 2 pcs. for each)
ZS-35-C | Panel mount adapter (Piping: For 01/N01)
ZS-35-D | Panel mount adapter + Front protective cover (Piping: For 01/N01)
ZS-35-F | Panel mount adapter + Front protective cover (Piping: For W1/WF1/M5/C4/C6)

Part no. | Option
---|---
ZS-24-A | Bracket A (Mounting screw M5 x 6L, M4 x 5L, 2 pcs. for each)
ZS-24-B | Bracket B (Mounting screw M5 x 6L, M4 x 5L, 2 pcs. for each)
ZS-24-D | Bracket D (Mounting screw M5 x 6L, M4 x 5L, 2 pcs. for each)
ZS-35-C | Panel mount adapter (Piping: For 01/N01)
ZS-35-D | Panel mount adapter + Front protective cover (Piping: For 01/N01)
ZS-35-F | Panel mount adapter + Front protective cover (Piping: For W1/WF1/M5/C4/C6)

Options 1/Part No.

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

Nil
M: Fixed PSI unit
P: With unit switching function

Note 1: Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.
Note 2: Unit: kPa, MPa

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

Nil
M: Fixed PSI unit
P: With unit switching function

Note 1: Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.
Note 2: Unit: kPa, MPa

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

Nil
M: Fixed PSI unit
P: With unit switching function

Note 1: Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.
Note 2: Unit: kPa, MPa
ZSE40A(F)/ISE40A Series

How to Order [For M8 (3 pins) connector]

For vacuum
ZSE40A 01 N M L

For positive pressure
ISE40A 01 N M L

Rated pressure range
ISE40A −0.1 to 1.000 MPa
ZSE40A 0.0 to −101.3 kPa

Piping specifications

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>R1/8 (M5 female threaded)</th>
<th>NPT1/8 (M5 female threaded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>R1/8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N01</td>
<td>NPT1/8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Output specifications

- N: NPN open collector 1 output
- P: PNP open collector 1 output

Unit specifications

<table>
<thead>
<tr>
<th>Code</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td>With unit display switching function (Note 1)</td>
</tr>
<tr>
<td>M</td>
<td>Fixed SI unit (Note 2)</td>
</tr>
<tr>
<td>P</td>
<td>With unit switching function (Initial value psi) (Note 1)</td>
</tr>
</tbody>
</table>

Note 1) Under the New Measurement Law, Unit specifications/sales of switches with the unit switching function are not allowed for use in Japan. Note 2) Unit kPa, MPa.

Options 1/Part No.
When optional parts are required separately, use the following part numbers to place an order.

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZS-24-A</td>
<td>Bracket A</td>
<td>Bracket Mounting screw M3 x 5L, M4 x 5L (2 pcs. for each)</td>
</tr>
<tr>
<td>ZS-24-D</td>
<td>Bracket D</td>
<td>Bracket Mounting screw M3 x 5L, M4 x 5L (2 pcs. for each)</td>
</tr>
</tbody>
</table>

Option 1

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Operation manual (Note)</th>
<th>Calibration certificate (Note)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Option 2

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Operation manual (Note)</th>
<th>Calibration certificate (Note)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note) All texts in both English and Japanese.

M8 connector type

- No lead wires are connected.
## Specifications

### Piping Specifications

<table>
<thead>
<tr>
<th>Port no.</th>
<th>01</th>
<th>N01</th>
<th>W1</th>
<th>WF1</th>
<th>M5</th>
<th>C4</th>
<th>C6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port size</td>
<td>R1/8 (With M5 female thread)</td>
<td>NPT1/8 (With M5 female thread)</td>
<td>Rc1/8</td>
<td>G1/8</td>
<td>M5 x 0.8 female thread</td>
<td>φ4 One-touch fitting</td>
<td>φ6 One-touch fitting</td>
</tr>
<tr>
<td>Material of parts in contact with fluid</td>
<td>Sensor pressure receiving area</td>
<td>Silicon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piping port</td>
<td>C3602 (Electroless nickel plating)</td>
<td>ZDC2</td>
<td>ZDC2</td>
<td>O-ring: HNBR</td>
<td>O-ring: HNBR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>78 g / 79 g</td>
<td>97 g</td>
<td>104 g / 101 g</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M8 connector</td>
<td>45 g</td>
<td>46 g</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Set Pressure Range and Rated Pressure Range

Set the pressure within the rated pressure range.
The set pressure range is the range of pressure that is possible in setting.
The rated pressure range is the range of pressure that satisfies the specifications (accuracy, linearity, etc.) on the switch.
Although it is possible to set a value outside the rated pressure range, the specifications will not be guaranteed even if the value stays within the set pressure range.

<table>
<thead>
<tr>
<th>Switch</th>
<th>Pressure range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>–100 kPa</td>
</tr>
<tr>
<td>For vacuum</td>
<td></td>
</tr>
<tr>
<td>pressure</td>
<td>ZSE40A</td>
</tr>
<tr>
<td>–101.3 kPa</td>
<td>0</td>
</tr>
<tr>
<td>–105 kPa</td>
<td></td>
</tr>
<tr>
<td>For compound</td>
<td></td>
</tr>
<tr>
<td>pressure</td>
<td>ZSE40AF</td>
</tr>
<tr>
<td>–100 kPa</td>
<td></td>
</tr>
<tr>
<td>–105 kPa</td>
<td></td>
</tr>
<tr>
<td>For positive</td>
<td></td>
</tr>
<tr>
<td>pressure</td>
<td>ISE40A</td>
</tr>
<tr>
<td>–100 kPa</td>
<td></td>
</tr>
<tr>
<td>–105 kPa</td>
<td></td>
</tr>
<tr>
<td>(~0.105 MPa)</td>
<td></td>
</tr>
</tbody>
</table>

Analog Output

Voltage output

Current output

<table>
<thead>
<tr>
<th>Range</th>
<th>Rated pressure range</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>For vacuum</td>
<td>0.0 to –101.3 kPa</td>
<td>10.1 kPa</td>
<td>0</td>
<td>–101.3 kPa</td>
</tr>
<tr>
<td>For compound</td>
<td>–100.0 to 100.0 kPa</td>
<td>——</td>
<td>–100.0 kPa</td>
<td>100.0 kPa</td>
</tr>
<tr>
<td>For positive</td>
<td>–0.100 to 1.000 MPa</td>
<td>–0.100 MPa</td>
<td>0</td>
<td>1.000 MPa</td>
</tr>
</tbody>
</table>
Internal Circuits and Wiring Examples

-X
NPN (2 outputs) + Copy function

-Y
PNP (2 outputs) + Copy function

-R/-S
-R: NPN (2 outputs) + Analog voltage output
-S: NPN (2 outputs) + Analog current output

-T/-V
-T: PNP (2 outputs) + Analog voltage output
-V: PNP (2 outputs) + Analog current output

For M8 connector, 3 pins
-N
NPN (1 output)

-P
PNP (1 output)
When the pressure switch is used in a place where water and dust splashes may occur, insert a tube into the atmospheric vent port, and route the other end of the tube to a safe place away from water and dust.

* SMC TU0425 (polyurethane, O.D. ø4, I.D. ø2.5) suits to the pressure switch.

When the pressure switch is used in a place where water and dust splashes may occur, insert a tube into the atmospheric vent port, and route the other end of the tube to a safe place away from water and dust.

* SMC TU0425 (polyurethane, O.D. ø4, I.D. ø2.5) suits to the pressure switch.
When the pressure switch is used in a place where water and dust splashes may occur, insert a tube into the atmospheric vent port, and route the other end of the tube to a safe place away from water and dust.

* SMC TU0425 (polyurethane, O.D. ø4, I.D. ø2.5) suits to the pressure switch.

Dimensions/For M8 (3-pin) connector

ZSE40A/ISE40A-01-□-□
-N01-□-□-L

---

M8 (3-pin) cable with connector

V100-49-1-□

---

PCA-1557772
Dimensions (For details about lead wires, refer to the product specifications.)

ZSE40A(F)/ISE40A-C4

-ZSE40A(F)/ISE40A-C6

2 x 4.5
8 depth, depth of counter bore 4

Atmospheric vent port ø2.6

When the pressure switch is used in a place where water and dust splashes may occur, insert a tube into the atmospheric vent port, and route the other end of the tube to a safe place away from water and dust.

+ SMC TU0425 (polyurethane, O.D. ø4, I.D. ø2.5) suits to the pressure switch.

-ZSE40A(F)/ISE40A Series

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2-Color Display High-Precision Digital Pressure Switch **ZSE40A(F)/ISE40A Series**

**Dimensions** (For details about lead wires, refer to the product specifications.)

**ZSE40A(F)/ISE40A-01-□-□-A□**

With bracket A

For M8 (3-pin) connector

**ZSE40A/ISE40A-01-□-□-LA**

With bracket A
**ZSE40A(F)/ISE40A Series**

**Dimensions** (For details about lead wires, refer to the product specifications.)

ZSE40A(F)/ISE40A-01-DD
-N01-DD

With bracket D

For M8 (3-pin) connector
ZSE40A/ISE40A-01-DD-LD
-N01-DD-LD

With bracket D
Dimensions (For details about lead wires, refer to the product specifications.)

ZSE40A(F)/ISE40A-W1-□-□A□
With bracket A

ZSE40A(F)/ISE40A-W1-□-□B□
With bracket B
ZSE40A(F)/ISE40A Series

Dimensions (For details about lead wires, refer to the product specifications.)

ZSE40A(F)/ISE40A-W1-□-□D□
-WF1-□-□D□

With bracket D
Dimensions (For details about lead wires, refer to the product specifications.)

ZSE40A(F)/ISE40A-01-□-□E□
-N01-□-□E□

Panel mount adapter

ZSE40A(F)/ISE40A-01-□-□F□
-N01-□-□F□

Panel mount adapter + Front protective cover
**Dimensions** (For details about lead wires, refer to the product specifications.)

**ZSE40A(F)/ISE40A-W1-□-□E□**

- **Panel mount adapter**

**ZSE40A(F)/ISE40A-WF1-□-□E□**

- **Panel mount adapter + Front protective cover**
2-Color Display High-Precision Digital Pressure Switch **ZSE40A(F)/ISE40A Series**

**Dimensions** (For details about lead wires, refer to the product specifications.)

**ZSE40A(F)/ISE40A-C4-□E□ -C6-□E□**

Panel mount adapter

Panel thickness 1 to 5

**ZSE40A(F)/ISE40A-C4-□F□ -C6-□F□**

Panel mount adapter + Front protective cover

Panel thickness 1 to 5
Panel fitting dimensions

Panel thickness 1 to 5 mm

Note) This is the minimum value for the piping method 01 or N01. Take the piping material and tubing into account for design. When the corner is to have radius, it must be R3 or less.
**2-Color Display High-Precision Digital Pressure Switch ZSE40A(F)/ISE40A Series**

**Function Details**

**A Copy function (F97)**
The settings of the master sensor can be copied to the slave sensors, reducing setting labor and minimizing risk of mistakes in setting. Can copy to up to 10 switches simultaneously. (Maximum transmission distance 4 m)

1) Wire as shown in the left figure.
2) Select the slave switch which is to be the master, and change it into a master using the buttons. (In the default setting, all switches are set as slaves.)
3) Press the button of the master switch to start copying.

**B Auto-preset function (F4)**
Auto-preset function, when selected in the initial setting, calculates and stores the set-value from the measured pressure. The optimum set-value is determined automatically by repeating vacuum and break with the target workpiece several times.

**C Display calibration function (F6)**
Fine adjustment of the indicated value of the pressure sensor can be made within the range of ±5% of the read value. (The scattering of the indicated value can be eliminated.)

![Formula for Obtaining the Set-Value](image)

**D Peak/Bottom value indication**
This function constantly detects and updates the maximum (minimum) value and allows to hold the maximum (minimum) pressure value. When the buttons are simultaneously pressed for 1 second or longer, while ”holding”, the hold value will be reset.

**E Keylock function**
Prevents operation errors such as accidentally changing setting values.

**F Zero-clear function**
This function clears and resets the zero value on the display of measured pressure. For the pressure switch with analog output, the analog output shifts according to the indication. The indicated value can be adjusted within ±7% F.S. of the pressure when ex-factory. (ZSE40AF (for compound pressure) ±3.5% F.S.)
**G Error indication function**

<table>
<thead>
<tr>
<th>Error name</th>
<th>Error code</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overcurrent error</td>
<td>Er 1</td>
<td>Load current of 80 mA or more is applied to the switch output (OUT1).</td>
<td>Eliminate the cause of the over current by turning off the power supply, and then turn on it again.</td>
</tr>
<tr>
<td></td>
<td>Er 2</td>
<td>Load current of 80 mA or more is applied to the switch output (OUT2).</td>
<td></td>
</tr>
<tr>
<td>Residual pressure error</td>
<td>Er 3</td>
<td>During zero-clear operation, pressure over ±7% F.S. is applied. (ZSE40AF (compound) ±3.5% F.S.) After 1 second, the mode will reset to measurement mode. ±1% F.S. of the zero-clear range varies between individual products.</td>
<td>Perform zero-clear operation again after restoring the applied pressure to an atmospheric pressure condition.</td>
</tr>
<tr>
<td>Applied pressure error</td>
<td>KKH</td>
<td>Supply pressure exceeds the maximum set pressure.</td>
<td>Reset applied pressure to a level within the set pressure range.</td>
</tr>
<tr>
<td>Auto-shift error</td>
<td>°r</td>
<td>The value measured at the time of auto-shift input is outside the set pressure range. * After displaying the error code for about 1 second, the switch returns to the measuring mode.</td>
<td>The controller does not respond to the auto-shift signal. Check the equipment and machinery for this point.</td>
</tr>
<tr>
<td>System error</td>
<td>Er 0</td>
<td>Internal data error</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Er 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Er 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Er 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Er 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Er 9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If the failure cannot be solved after the above instructions are performed, please contact SMC for investigation.

**H Anti-chattering function (F3)**

A large bore cylinder or ejector consumes a large volume of air in operation and may experience a temporary drop in the supply pressure. This function prevents detection of such temporary drops in the supply pressure as an error.

*<Principle>*

This function averages pressure values measured during the response time set by the user and then compares the average pressure value with the pressure set point value to output the result on the switch.

![Anti-chattering function diagram](image)

| Available response time settings | 20 ms, 100 ms, 500 ms, 1000 ms, 2000 ms |

**I Display unit switching function (F0)**

Display units can be switched with this function.

<table>
<thead>
<tr>
<th>Minimum unit setting</th>
<th>Display unit</th>
<th>PR</th>
<th>GF</th>
<th>brF</th>
<th>PS</th>
<th>iH</th>
<th>mH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZSE40A (vacuum pressure)</td>
<td>0.1</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.01</td>
<td>0.1</td>
<td>1</td>
</tr>
<tr>
<td>ZSE40AF (compound pressure)</td>
<td>0.1</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.02</td>
<td>0.1</td>
<td>1</td>
</tr>
<tr>
<td>ISE40 (positive pressure)</td>
<td>1</td>
<td>0.001</td>
<td>0.01</td>
<td>0.01</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The ZSE40A (vacuum pressure) and ZSE40AF (compound pressure) will have different setting and display resolution when the unit is set to MPa.
J Power-saving mode (F80)
Power-saving mode can be selected. It shifts to the power-saving mode without button operation for 30 seconds. It is set to the normal mode (Power-saving mode is OFF) when ex-factory. (Decimal points and operation indicator light (only when the switch output is turned ON) blink in the power-saving mode.)

K Setting of secret code (F81)
Users can select whether a secret code must be entered to release key lock. At the time of shipment from the factory, it is set such that the secret code is not required.

L Auto-shift function (F5)
When there are large fluctuations in the supply pressure, the switch may fail to operate correctly. The auto-shift function compensates such supply pressure fluctuations. It measures the pressure at the time of auto-shift signal input and uses it as the reference pressure to correct the set-value on the switch.

Set-value correction by auto-shift function

Settable Range for Auto-Shift Input

<table>
<thead>
<tr>
<th>Compound pressure</th>
<th>Vacuum pressure</th>
<th>Positive pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>–105.0 to 105.0 kPa</td>
<td>10.0 to –105.0 kPa</td>
<td>–0.105 to 1.050 MPa</td>
</tr>
<tr>
<td>–210 to 210 kPa</td>
<td>115.0 to –115.0 kPa</td>
<td>–1.155 to 1.155 MPa</td>
</tr>
</tbody>
</table>

Auto-shift zero
The basic function of auto-shift zero is the same as the function for auto-shift. Also, it corrects values on the display, based on a pressure value of “0”, when the auto-shift is selected.
**ZSE40A(F)/ISE40A Series**

**Made to Order**

Please contact SMC for detailed dimensions, specifications and lead times.

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**1 Lead Wire Length 3 m**

![Symbol](-X501)

It has a lead wire extended to 3 meters.

**How to Order**

*Refer to “How to Order” on page 47 for standard specifications.*

ZSE40A(F)/ISE40A – [ ] – [ ] – [ ] – X501

- Piping specifications
- Output specifications
- Unit specifications/Option

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**2 M12 4-pin Pre-wired Connector (Lead wire length 100 mm)**

![Symbol](-X531)

**How to Order**

*Refer to “How to Order” on page 47 for standard specifications.*

ZSE40A(F)/ISE40A – [ ] – [ ] – [ ] – X531

- Piping specifications
- Output specifications
- Unit specifications/Option

**Pin arrangement**

- 1 DC (+)
- 2 OUT2
- 3 DC (-)
- 4 OUT1

**Output specifications**

- X: NPN open collector 2 outputs
- Y: PNP open collector 2 outputs