

1 Output

# 3-Screen Display High-Precision Digital Pressure Switch

# ZSE20(F)/ISE20 Series



RoHS

IP40

## How to Order



Made to Order  
(pp. 42 to 48)

For Positive Pressure

ISE20 - N - M - M5 - [ ] - [ ] - [ ]

For Vacuum/  
Compound Pressure

ZSE20 - N - M - M5 - [ ] - [ ] - [ ]

1 2 3 4 5 6 7

### 1 Rated pressure range

|        |                 |
|--------|-----------------|
| ZSE20  | 0 to -101 kPa   |
| ZSE20F | -100 to 100 kPa |

### 2 Output specification

| Symbol | Description                 |
|--------|-----------------------------|
| N      | NPN open collector 1 output |
| P      | PNP open collector 1 output |




### 3 Unit specification

| Symbol | Description                                    |
|--------|--|
| Nil    | Units selection function*1                     |
| M      | SI units only*2                                |
| P      | Units selection function (Initial value psi)*1 |

\*1 Under the New Measurement Act, switches with the units selection function are no longer allowed for use in Japan.

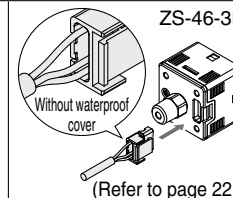
\*2 Fixed units: kPa, MPa

### 4 Piping specification

| Symbol | Description  | Symbol  | Description                           |
|--------|--|---|---------------------------------------|
| M5     | <br>Piping port                           | C4H   | One-touch fitting ø4 mm Straight type |
|        |  | C6H   | One-touch fitting ø6 mm               |
|        |  | N7H   | One-touch fitting ø1/4 inch           |
| O1     | <br>R1/8 R1/8 Piping adapter ZS-46-N1     | C4L   | One-touch fitting ø4 mm Elbow type    |
|        |  | C6L   | One-touch fitting ø6 mm               |
|        |  | N7L   | One-touch fitting ø1/4 inch           |
| N01    | <br>NPT1/8 NPT1/8 Piping adapter ZS-46-N2 | * One-touch fitting is shipped together with the product. |                                       |

### 5 Option 1

| Symbol | Description                                      |
|--------|--|
| Nil    | Without lead wire                                |
| L      | Lead wire with connector (3-core, 2 m lead wire) |



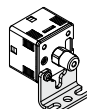
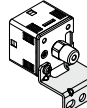
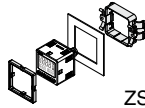
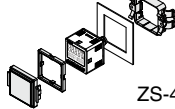
\* For the lead wire with M12 connector, refer to page 43.

### 7 Option 3

| Symbol | Operation manual*1 | Calibration certificate*1 |
|--------|--------------------|---------------------------|
| Nil    | ○                  | —                         |
| Y      | —                  | —                         |
| K      | ○                  | ○                         |
| T      | —                  | ○                         |

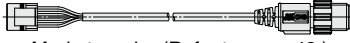
\*1 All texts are in both English and Japanese.

### 6 Option 2

| Symbol | Description  |
|--------|--|
| Nil    | None   |
| A1     | Bracket A (Vertical mounting)  ZS-46-A1               |
| A2     | Bracket B (Horizontal mounting)  ZS-46-A2             |
| B      | Panel mount adapter  ZS-46-B                          |
| D      | Panel mount adapter + Front protection cover  ZS-46-D |

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                                  | Part no.    | Note   |
|--|-------------|--|
| Bracket A                                    | ZS-46-A1    | Tapping screw: Nominal size 3 x 8 L (2 pcs.)   |
| Bracket B                                    | ZS-46-A2    | Tapping screw: Nominal size 3 x 8 L (2 pcs.)   |
| Panel mount adapter                          | ZS-46-B     | —  |
| Panel mount adapter + Front protection cover | ZS-46-D     | —  |
| Lead wire with connector                     | ZS-46-3L    | 3-core, 2 m, Non-waterproof (Without waterproof cover)   |
| Lead wire with M12 connector                 | ZS-46-5LM12 | <br>Made to order (Refer to page 43.) |
| Front protection cover                       | ZS-27-01    | —  |
| R1/8 Piping adapter                          | ZS-46-N1    | R1/8   |
| NPT1/8 Piping adapter                        | ZS-46-N2    | NPT1/8   |
| One-touch fitting ø4 mm straight             | ZS-46-C4H   | —  |
| One-touch fitting ø6 mm straight             | ZS-46-C6H   | —  |
| One-touch fitting ø1/4 inch straight         | ZS-46-N7H   | —  |
| One-touch fitting ø4 mm elbow                | ZS-46-C4L   | —  |
| One-touch fitting ø6 mm elbow                | ZS-46-C6L   | —  |
| One-touch fitting ø1/4 inch elbow            | ZS-46-N7L   | —  |
| Spacer for fitting extension                 | ZS-46-M5A   | Made to order (Refer to page 44.)  |

2 Outputs + Analog Output (Voltage/Current)



3-Screen Display High-Precision  
Digital Pressure Switch

RoHS

IP40

# ZSE20A(F)/ISE20A Series

## How to Order



Made to Order  
(pp. 42 to 48)

For Positive Pressure

**ISE20A** - **X** - **M** - **M5** - [ ] - [ ] - [ ]

For Vacuum/  
Compound Pressure

**ZSE20A** - **X** - **M** - **M5** - [ ] - [ ] - [ ]

Rated pressure range

**ISE20A** -0.1 to 1 MPa

### 1 Rated pressure range

|                |                 |
|----------------|-----------------|
| <b>ZSE20A</b>  | 0 to -101 kPa   |
| <b>ZSE20AF</b> | -100 to 100 kPa |

### 2 Output specification

| Symbol   | Description   |
|----------|---|
| <b>R</b> | NPN open collector 2 outputs + Analog voltage output *1 |
| <b>S</b> | NPN open collector 2 outputs + Analog current output *1 |
| <b>T</b> | PNP open collector 2 outputs + Analog voltage output *1 |
| <b>V</b> | PNP open collector 2 outputs + Analog current output *1 |
| <b>X</b> | NPN open collector 2 outputs + Copy function            |
| <b>Y</b> | PNP open collector 2 outputs + Copy function            |

\*1 Can be switched to auto-shift or copy function




### 3 Unit specification

| Symbol     | Description                                    |
|------------|--|
| <b>Nil</b> | Units selection function*1                     |
| <b>M</b>   | SI units only*2                                |
| <b>P</b>   | Units selection function (Initial value psi)*1 |

\*1 Under the New Measurement Act, switches with the units selection function are no longer allowed for use in Japan.

\*2 Fixed units: kPa, MPa

### 4 Piping specification

| Symbol | Description   | Symbol  | Description                 |  |
|--------|---|---|-----------------------------|--|
| M5     | M5 female thread  | C4H   | One-touch fitting ø4 mm     | Straight type<br> |
|        |  Piping port | C6H   | One-touch fitting ø6 mm     |  |
|        |   | N7H   | One-touch fitting ø1/4 inch |  |
| 01     | R1/8  | C4L   | One-touch fitting ø4 mm     | Elbow type<br>    |
|        | R1/8 Piping adapter   | C6L   | One-touch fitting ø6 mm     |  |
|        | ZS-46-N1  | N7L   | One-touch fitting ø1/4 inch |  |
| N01    | NPT1/8  | * One-touch fitting is shipped together with the product. |                             |  |
|        | NPT1/8 Piping adapter   |   |                             |  |
|        | ZS-46-N2  |   |                             |  |

### 5 Option 1

| Symbol     | Description                                      |
|------------|--|
| <b>Nil</b> | Without lead wire                                |
| <b>J</b>   | Lead wire with connector (5-core, 2 m lead wire) |
|            | Without waterproof cover                         |

\* For the lead wire with M12 connector, refer to page 43.

### 7 Option 3

| Symbol     | Operation manual*1 | Calibration certificate*1 |
|------------|--------------------|---------------------------|
| <b>Nil</b> | ○                  | —                         |
| <b>Y</b>   | —                  | —                         |
| <b>K</b>   | ○                  | ○                         |
| <b>T</b>   | —                  | ○                         |

\*1 All texts are in both English and Japanese.

### 6 Option 2

| Symbol     | Description                                  |
|------------|--|
| <b>Nil</b> | None   |
| <b>A1</b>  | Bracket A (Vertical mounting)                |
|            | ZS-46-A1                                     |
| <b>A2</b>  | Bracket B (Horizontal mounting)              |
|            | ZS-46-A2                                     |
| <b>B</b>   | Panel mount adapter                          |
|            | ZS-46-B                                      |
| <b>D</b>   | Panel mount adapter + Front protection cover |
|            | ZS-46-D                                      |

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                                  | Part no.           | Note   |
|--|--------------------|--|
| Bracket A                                    | <b>ZS-46-A1</b>    | Tapping screw: Nominal size 3 x 8 L (2 pcs.)           |
| Bracket B                                    | <b>ZS-46-A2</b>    | Tapping screw: Nominal size 3 x 8 L (2 pcs.)           |
| Panel mount adapter                          | <b>ZS-46-B</b>     | —  |
| Panel mount adapter + Front protection cover | <b>ZS-46-D</b>     | —  |
| Lead wire with connector                     | <b>ZS-46-5L</b>    | 5-core, 2 m, Non-waterproof (Without waterproof cover) |
| Lead wire with M12 connector                 | <b>ZS-46-5LM12</b> | Made to order (Refer to page 43.)                      |
| Front protection cover                       | <b>ZS-27-01</b>    | —  |
| R1/8 Piping adapter                          | <b>ZS-46-N1</b>    | R1/8   |
| NPT1/8 Piping adapter                        | <b>ZS-46-N2</b>    | NPT1/8   |
| One-touch fitting ø4 mm straight             | <b>ZS-46-C4H</b>   | —  |
| One-touch fitting ø6 mm straight             | <b>ZS-46-C6H</b>   | —  |
| One-touch fitting ø1/4 inch straight         | <b>ZS-46-N7H</b>   | —  |
| One-touch fitting ø4 mm elbow                | <b>ZS-46-C4L</b>   | —  |
| One-touch fitting ø6 mm elbow                | <b>ZS-46-C6L</b>   | —  |
| One-touch fitting ø1/4 inch elbow            | <b>ZS-46-N7L</b>   | —  |
| Spacer for fitting extension                 | <b>ZS-46-M5A</b>   | Made to order (Refer to page 44.)                      |

2 Outputs + Analog Output (Voltage/Current)



# 3-Screen Display High-Precision Digital Pressure Switch

RoHS

IP65

# ZSE20B(F)/ISE20B Series

For the IO-Link compatible type, refer to page 15.  
For the M12 connector type, refer to page 13-1.

## How to Order



For Positive Pressure

**ISE20B** - **X** - **M** - **M5** - [ ] - [ ] - [ ]

For Vacuum/  
Compound Pressure

**ZSE20B** - **X** - **M** - **M5** - [ ] - [ ] - [ ]



Made to Order  
(pp. 42 to 48)

### 1 Rated pressure range

|                |                 |
|----------------|-----------------|
| <b>ZSE20B</b>  | 0 to -101 kPa   |
| <b>ZSE20BF</b> | -100 to 100 kPa |

### 2 Output specification

| Symbol   | Description   |
|----------|---|
| <b>R</b> | NPN open collector 2 outputs + Analog voltage output *1 |
| <b>S</b> | NPN open collector 2 outputs + Analog current output *1 |
| <b>T</b> | PNP open collector 2 outputs + Analog voltage output *1 |
| <b>V</b> | PNP open collector 2 outputs + Analog current output *1 |
| <b>X</b> | NPN open collector 2 outputs + Copy function            |
| <b>Y</b> | PNP open collector 2 outputs + Copy function            |

\*1 Can be switched to auto-shift or copy function

### 3 Unit specification

| Symbol     | Description                                    |
|------------|--|
| <b>Nil</b> | Units selection function*1                     |
| <b>M</b>   | SI units only*2                                |
| <b>P</b>   | Units selection function (Initial value psi)*1 |

\*1 Under the New Measurement Act, switches with the units selection function are no longer allowed for use in Japan.

\*2 Fixed units: kPa, MPa

### 4 Piping specification

| Symbol     | Description                       | Symbol  | Description             |
|------------|-----------------------------------|---|-------------------------|
| <b>M5</b>  | M5 female thread                  | <b>C4L</b>  | One-touch fitting ø4 mm |
|            | Piping port                       | <b>C6L</b>  | One-touch fitting ø6 mm |
| <b>01</b>  | R1/8 Piping adapter<br>ZS-46-N1   | * One-touch fitting is shipped together with the product. |                         |
| <b>N01</b> | NPT1/8 Piping adapter<br>ZS-46-N2 |   |                         |

### 5 Option 1

| Symbol     | Description   |
|------------|---|
| <b>Nil</b> | Without lead wire   |
| <b>W</b>   | Lead wire with connector (5-core, 2 m lead wire, With waterproof cover) |

\* For the lead wire with M12 connector, refer to page 43.

### 7 Option 3

| Symbol     | Operation manual*1 | Calibration certificate*1 |
|------------|--------------------|---------------------------|
| <b>Nil</b> | ○                  | —                         |
| <b>Y</b>   | —                  | —                         |
| <b>K</b>   | ○                  | ○                         |
| <b>T</b>   | —                  | ○                         |

\*1 All texts are in both English and Japanese.

### 6 Option 2

| Symbol     | Description                                  |
|------------|--|
| <b>Nil</b> | None   |
| <b>A1</b>  | Bracket A (Vertical mounting)                |
| <b>A2</b>  | Bracket B (Horizontal mounting)              |
| <b>B</b>   | Panel mount adapter                          |
| <b>D</b>   | Panel mount adapter + Front protection cover |

## Options/Part Nos.

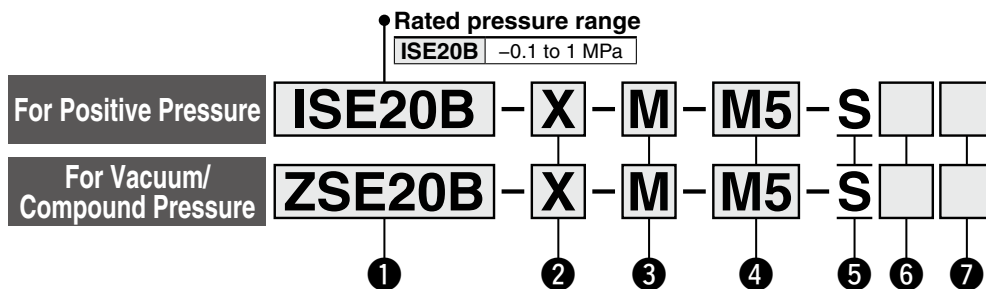
When only optional parts are required, order with the part numbers listed below.

| Description  | Part no.           | Note  |
|--|--------------------|---|
| Bracket A  | <b>ZS-46-A1</b>    | Tapping screw: Nominal size 3 x 8 L (2 pcs.)    |
| Bracket B  | <b>ZS-46-A2</b>    | Tapping screw: Nominal size 3 x 8 L (2 pcs.)    |
| Panel mount adapter  | <b>ZS-46-B</b>     | —   |
| Panel mount adapter + Front protection cover   | <b>ZS-46-D</b>     | —   |
| Panel mount adapter (Compatible with the panel holes of the Z/ISE40A)                          | <b>ZS-46-F</b>     | Made to order (Refer to page 45.)               |
| Panel mount adapter + Front protection cover (Compatible with the panel holes of the Z/ISE40A) | <b>ZS-46-G</b>     | Made to order (Refer to page 45.)               |
| Lead wire with connector   | <b>ZS-46-5F</b>    | 5-core, 2 m, Waterproof (With waterproof cover) |
| Lead wire with M12 connector   | <b>ZS-46-5FM12</b> | Made to order (Refer to page 43.)               |
| Front protection cover   | <b>ZS-27-01</b>    | —   |
| R1/8 Piping adapter  | <b>ZS-46-N1</b>    | R1/8  |
| NPT1/8 Piping adapter  | <b>ZS-46-N2</b>    | NPT1/8  |
| One-touch fitting ø4 mm elbow  | <b>ZS-46-C4L</b>   | —   |
| One-touch fitting ø6 mm elbow  | <b>ZS-46-C6L</b>   | —   |
| Spacer for fitting extension   | <b>ZS-46-M5A</b>   | Made to order (Refer to page 44.)               |

# 3-Screen Display High-Precision Digital Pressure Switch **ZSE20B(F)/ISE20B Series**



## How to Order [M12 Connector Type]



**Made to Order**  
(pp. 42 to 48)

### ① Rated pressure range

|                |                 |
|----------------|-----------------|
| <b>ZSE20B</b>  | 0 to -101 kPa   |
| <b>ZSE20BF</b> | -100 to 100 kPa |

### ② Output specification

| Symbol   | Description  |
|----------|--|
| <b>R</b> | NPN open collector 1 output + Analog voltage output *1 |
| <b>S</b> | NPN open collector 1 output + Analog current output *1 |
| <b>T</b> | PNP open collector 1 output + Analog voltage output *1 |
| <b>V</b> | PNP open collector 1 output + Analog current output *1 |
| <b>X</b> | NPN open collector 2 outputs                           |
| <b>Y</b> | PNP open collector 2 outputs                           |

\*1 Can be switched to auto-shift or copy

### ③ Unit specification

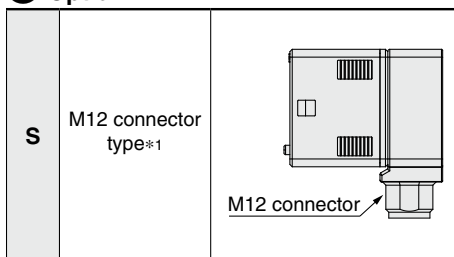
| Symbol     | Description                                    |
|------------|--|
| <b>Nil</b> | Units selection function*1                     |
| <b>M</b>   | SI units only*2                                |
| <b>P</b>   | Units selection function (Initial value psi)*1 |

\*1 Under the New Measurement Act, switches with the units selection function are no longer allowed for use in Japan.  
\*2 Fixed units: kPa, MPa

### ④ Piping specification

| Symbol     | Description                          |
|------------|--------------------------------------|
| <b>M5</b>  | M5 female thread                     |
| <b>01</b>  | R1/8                                 |
| <b>N01</b> | NPT1/8                               |
| <b>C4L</b> | One-touch fitting ø4 mm (Elbow type) |
| <b>C6L</b> | One-touch fitting ø6 mm (Elbow type) |

### ⑤ Option 1



\*1 Lead wire is not included.

### ⑥ Option 2

| Nil       | None                                  |          |
|-----------|---------------------------------------|----------|
| <b>A4</b> | Bracket D<br>(For M12 connector type) | ZS-46-A4 |
| <b>A5</b> | Bracket E<br>(For M12 connector type) | ZS-46-A5 |

### ⑦ Option 3

| Symbol     | Operation manual*1 | Calibration certificate*1 |
|------------|--------------------|---------------------------|
| <b>Nil</b> | ○                  | —                         |
| <b>Y</b>   | —                  | —                         |
| <b>K</b>   | ○                  | ○                         |
| <b>T</b>   | —                  | ○                         |

\*1 All texts are in both English and Japanese.

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description   | Part no.              | Note   |
|---|-----------------------|--|
| Bracket D   | <b>ZS-46-A4</b>       | Tapping screw: Nominal size 3 x 8 L (2 pcs.) |
| Bracket E   | <b>ZS-46-A5</b>       | Tapping screw: Nominal size 3 x 8 L (2 pcs.) |
| Lead wire with M12 connector (Straight)                 | <b>ZS-37-A</b>        | 3 m lead wire                                |
|   | <b>ZS-31-B</b>        | 5 m lead wire                                |
| Lead wire with M12 connector (Right-angle)              | <b>ZS-37-B</b>        | 3 m lead wire                                |
|   | <b>ZS-31-C</b>        | 5 m lead wire                                |
| Lead wire with M12 connector (Connectors on both sides) | <b>EX9-AC005-SSPS</b> | 0.5 m lead wire, straight                    |
|   | <b>EX9-AC010-SSPS</b> | 1 m lead wire, straight                      |
|   | <b>EX9-AC020-SSPS</b> | 2 m lead wire, straight                      |
|   | <b>EX9-AC030-SSPS</b> | 3 m lead wire, straight                      |
|   | <b>EX9-AC050-SSPS</b> | 5 m lead wire, straight                      |
|   | <b>EX9-AC100-SSPS</b> | 10 m lead wire, straight                     |
| R1/8 Piping adapter                                     | <b>ZS-46-N1</b>       | R1/8   |
| NPT1/8 Piping adapter                                   | <b>ZS-46-N2</b>       | NPT1/8                                       |
| One-touch fitting ø4 mm elbow                           | <b>ZS-46-C4L</b>      | —  |
| One-touch fitting ø6 mm elbow                           | <b>ZS-46-C6L</b>      | —  |

IO-Link Compatible (1 Output)



RoHS

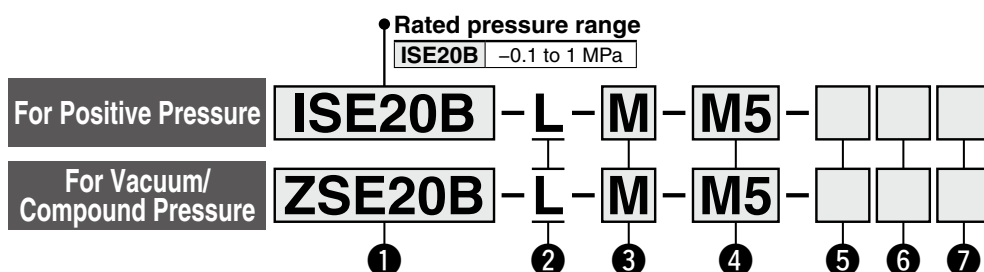
IP65

# 3-Screen Display High-Precision Digital Pressure Switch

# ZSE20B(F)-L/ISE20B-L Series

For 2 outputs + analog output type, refer to page 13.  
For the M12 connector type, refer to page 15-1.

## How to Order



### 1 Rated pressure range

|         |                 |
|---------|-----------------|
| ZSE20B  | 0 to -101 kPa   |
| ZSE20BF | -100 to 100 kPa |

### 2 Output specification

| Symbol | Description   |
|--------|---|
| L      | IO-Link/Switch: 1 output ⇐<br>(PNP or NPN switching type for switch output) |

### 3 Unit specification

| Symbol | Description                                    |
|--------|--|
| Nil    | Units selection function*1                     |
| M      | SI units only*2                                |
| P      | Units selection function (Initial value psi)*1 |

\*1 Under the New Measurement Act, switches with the units selection function are no longer allowed for use in Japan.  
\*2 Fixed units: kPa, MPa

### 4 Piping specification

| Symbol | Description          |
|--------|----------------------|
| M5     | M5 female thread<br> |
| 01     | R1/8<br>             |
| N01    | NPT1/8<br>           |

### 5 Option 1

| Symbol | Description   |
|--------|---|
| Nil    | Without lead wire   |
| W      | Lead wire with connector (5-core, 2 m lead wire, With waterproof cover)<br> |

\* For the lead wire with M12 connector, refer to page 43.

### 7 Option 3

| Symbol | Operation manual*1 | Calibration certificate*1 |
|--------|--------------------|---------------------------|
| Nil    | ○                  | —                         |
| Y      | —                  | —                         |
| K      | ○                  | ○                         |
| T      | —                  | ○                         |

\*1 All texts are in both English and Japanese.

### 6 Option 2

| Symbol | Description                                      |
|--------|--|
| Nil    | None   |
| A1     | Bracket A (Vertical mounting)<br>                |
| A2     | Bracket B (Horizontal mounting)<br>              |
| B      | Panel mount adapter<br>                          |
| D      | Panel mount adapter + Front protection cover<br> |

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

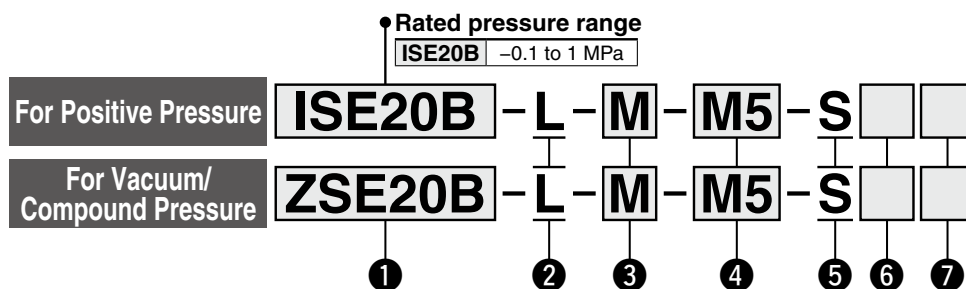
| Description                                  | Part no.    | Note  |
|--|-------------|---|
| Bracket A                                    | ZS-46-A1    | Tapping screw: Nominal size 3 x 8 L (2 pcs.)    |
| Bracket B                                    | ZS-46-A2    | Tapping screw: Nominal size 3 x 8 L (2 pcs.)    |
| Panel mount adapter                          | ZS-46-B     | —   |
| Panel mount adapter + Front protection cover | ZS-46-D     | —   |
| Lead wire with connector                     | ZS-46-5F    | 5-core, 2 m, Waterproof (With waterproof cover) |
| Lead wire with M12 connector                 | ZS-46-5FM12 | <br>Made to order (Refer to page 43.)           |
| Front protection cover                       | ZS-27-01    | —   |
| R1/8 Piping adapter                          | ZS-46-N1    | R1/8  |
| NPT1/8 Piping adapter                        | ZS-46-N2    | NPT1/8  |



# 3-Screen Display High-Precision Digital Pressure Switch **ZSE20B(F)-L/ISE20B-L Series**



## How to Order [M12 Connector Type]



### ① Rated pressure range

|                |                 |
|----------------|-----------------|
| <b>ZSE20B</b>  | 0 to -101 kPa   |
| <b>ZSE20BF</b> | -100 to 100 kPa |

### ② Output specification

| Symbol   | Description   |
|----------|---|
| <b>L</b> | IO-Link/Switch: 1 output ⇐<br>(PNP or NPN switching type for switch output) |

### ③ Unit specification

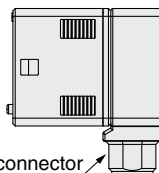
| Symbol     | Description                                    |
|------------|--|
| <b>Nil</b> | Units selection function*1                     |
| <b>M</b>   | SI units only*2                                |
| <b>P</b>   | Units selection function (Initial value psi)*1 |

\*1 Under the New Measurement Act, switches with the units selection function are no longer allowed for use in Japan.  
\*2 Fixed units: kPa, MPa

### ④ Piping specification

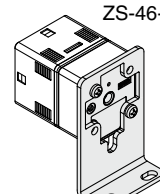
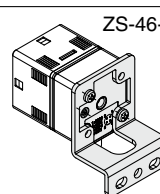
| Symbol     | Description      |
|------------|------------------|
| <b>M5</b>  | M5 female thread |
| <b>01</b>  | R1/8             |
| <b>N01</b> | NPT1/8           |

### ⑤ Option 1

|          |                      |  |
|----------|----------------------|--|
| <b>S</b> | M12 connector type*1 |  |
|----------|----------------------|--|

\*1 Lead wire is not included.

### ⑥ Option 2

|            |                                       |   |
|------------|---------------------------------------|---|
| <b>Nil</b> | None                                  |   |
| <b>A4</b>  | Bracket D<br>(For M12 connector type) |   |
| <b>A5</b>  | Bracket E<br>(For M12 connector type) |  |

### ⑦ Option 3

| Symbol     | Operation manual*1 | Calibration certificate*1 |
|------------|--------------------|---------------------------|
| <b>Nil</b> | ○                  | —                         |
| <b>Y</b>   | —                  | —                         |
| <b>K</b>   | ○                  | ○                         |
| <b>T</b>   | —                  | ○                         |

\*1 All texts are in both English and Japanese.

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description  | Part no.              | Note   |
|--|-----------------------|--|
| Bracket D  | <b>ZS-46-A4</b>       | Tapping screw: Nominal size 3 x 8 L (2 pcs.) |
| Bracket E  | <b>ZS-46-A5</b>       | Tapping screw: Nominal size 3 x 8 L (2 pcs.) |
| Lead wire with M12 connector<br>(Straight)                 | <b>ZS-37-A</b>        | 3 m lead wire                                |
|  | <b>ZS-31-B</b>        | 5 m lead wire                                |
| Lead wire with M12 connector<br>(Right-angle)              | <b>ZS-37-B</b>        | 3 m lead wire                                |
|  | <b>ZS-31-C</b>        | 5 m lead wire                                |
| Lead wire with M12 connector<br>(Connectors on both sides) | <b>EX9-AC005-SSPS</b> | 0.5 m lead wire, straight                    |
|  | <b>EX9-AC010-SSPS</b> | 1 m lead wire, straight                      |
|  | <b>EX9-AC020-SSPS</b> | 2 m lead wire, straight                      |
|  | <b>EX9-AC030-SSPS</b> | 3 m lead wire, straight                      |
|  | <b>EX9-AC050-SSPS</b> | 5 m lead wire, straight                      |
|  | <b>EX9-AC100-SSPS</b> | 10 m lead wire, straight                     |
| R1/8 Piping adapter  | <b>ZS-46-N1</b>       | R1/8   |
| NPT1/8 Piping adapter                                      | <b>ZS-46-N2</b>       | NPT1/8                                       |
| One-touch fitting ø4 mm elbow                              | <b>ZS-46-C4L</b>      | —  |
| One-touch fitting ø6 mm elbow                              | <b>ZS-46-C6L</b>      | —  |

2 Outputs + Analog Output (Voltage/Current)



3-Screen Display High-Precision  
Digital Pressure Switch for General Fluids

RoHS

IP65

**ZSE20C(F)/ISE20C(H) Series**

For the IO-Link compatible type,  
refer to page 27.

## How to Order



For Positive Pressure

**ISE20C** - **X** - **M** - **02** [ ] - [ ] - [ ] - [ ] - [ ]

For Vacuum/  
Compound Pressure

**ZSE20C** - **X** - **M** - **02** [ ] - [ ] - [ ] - [ ] - [ ]

### Rated pressure range

|                |               |
|----------------|---------------|
| <b>ISE20C</b>  | -0.1 to 1 MPa |
| <b>ISE20CH</b> | -0.1 to 2 MPa |

①

②

③

④

⑤

⑥

⑦

⑧ Made to order  
(pp. 42 to 48)

### ① Rated pressure range

|                |                 |
|----------------|-----------------|
| <b>ZSE20C</b>  | 0 to -101 kPa   |
| <b>ZSE20CF</b> | -100 to 100 kPa |

### ④ Piping specification

| Symbol     | Description                  |
|------------|------------------------------|
| <b>02</b>  | R1/4 (M5 female threaded)    |
| <b>N02</b> | NPT1/4 (M5 female threaded)  |
| <b>F02</b> | G1/4 (M5 female threaded)    |
| <b>C01</b> | Rc1/8                        |
| <b>A2</b>  | URJ1/4 (Face seal fitting)   |
| <b>B2</b>  | TSJ1/4 (Compression fitting) |

### ⑤ Piping direction

|            |                   |
|------------|-------------------|
| <b>Nil</b> | Rear ported<br>   |
| <b>L</b>   | Bottom ported<br> |

### ② Output specification

| Symbol   | Description  |
|----------|--|
| <b>R</b> | NPN open collector 2 outputs + Analog voltage output*1 |
| <b>S</b> | NPN open collector 2 outputs + Analog current output*1 |
| <b>T</b> | PNP open collector 2 outputs + Analog voltage output*1 |
| <b>V</b> | PNP open collector 2 outputs + Analog current output*1 |
| <b>X</b> | NPN open collector 2 outputs + Copy function           |
| <b>Y</b> | PNP open collector 2 outputs + Copy function           |

\*1 Can be switched to auto-shift or copy function

### ③ Unit specification

| Symbol     | Description                                    |
|------------|--|
| <b>Nil</b> | Units selection function*2                     |
| <b>M</b>   | SI units only*3                                |
| <b>P</b>   | Units selection function (Initial value psi)*3 |

\*2 Under the New Measurement Act, switches with the units selection function are no longer allowed for use in Japan.

\*3 Fixed units: kPa, MPa

### ⑦ Option 2

\* Note that the optional parts that can be used vary depending on the piping direction.

| Symbol     | Description |
|------------|-------------|
| <b>Nil</b> | None        |

### Rear ported (⑤ Piping direction: Nil)

| Symbol    | Description                                      | Symbol   | Description             |
|-----------|--|----------|-------------------------|
| <b>A1</b> | Bracket A<br>                                    | <b>B</b> | Panel mount adapter<br> |
| <b>D</b>  | Panel mount adapter + Front protection cover<br> |          | <b>ZS-46-B</b><br>      |
|           |  |          | <b>ZS-46-D</b><br>      |

### Bottom ported (⑤ Piping direction: L)

| Symbol    | Description                                      |
|-----------|--|
| <b>A3</b> | Bracket C<br>                                    |
| <b>E</b>  | Panel mount adapter<br>                          |
| <b>F</b>  | Panel mount adapter + Front protection cover<br> |
|           | <b>ZS-46-E</b><br>                               |
|           | <b>ZS-35-B</b><br>                               |
|           | <b>ZS-35-E</b><br>                               |

### ⑧ Option 3

| Symbol     | Operation manual*4 | Calibration certificate*4 |
|------------|--------------------|---------------------------|
| <b>Nil</b> | ○                  | —                         |
| <b>Y</b>   | —                  | —                         |
| <b>K</b>   | ○                  | ○                         |
| <b>T</b>   | —                  | ○                         |

\*4 All texts are in both English and Japanese.

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description  | Part no.           | Note  |
|--|--------------------|---|
| Bracket A  | <b>ZS-46-A1</b>    | For rear ported/Tapping screw: Nominal size 3 x 8 L (2 pcs.)                                |
| Bracket C  | <b>ZS-46-E</b>     | For bottom ported/Tapping screw: Nominal size 3 x 10 L (2 pcs.)                             |
| Panel mount adapter  | <b>ZS-46-B</b>     | Rear ported   |
|  | <b>ZS-35-B</b>     | Bottom ported   |
| Panel mount adapter + Front protection cover   | <b>ZS-46-D</b>     | Rear ported   |
|  | <b>ZS-35-E</b>     | Bottom ported   |
| Panel mount adapter (Compatible with the panel holes of the ZISE80)                          | <b>ZS-46-F</b>     | Rear ported, Made to order (Refer to page 46.)  |
| Panel mount adapter + Front protection cover (Compatible with the panel holes of the ZISE80) | <b>ZS-46-G</b>     | Rear ported, Made to order (Refer to page 46.)  |
| Lead wire with connector   | <b>ZS-46-5F</b>    | 5-core, 2 m, Waterproof (With waterproof cover)   |
| Lead wire with M12 connector   | <b>ZS-46-5FM12</b> | Made to order (Refer to page 43.)   |
| Front protection cover   | <b>ZS-27-01</b>    | Rear ported   |
|  | <b>ZS-35-01</b>    | Bottom ported   |
| Adapter with restrictor Rc1/4  | <b>ZS-31-X175</b>  | To prevent the effects of water collision with inertia force Dimensions (Refer to page 32.) |
| Adapter with restrictor NPT1/4   | <b>ZS-31-X186</b>  |   |
| Adapter with restrictor Rc1/8  | <b>ZS-31-X188</b>  |   |
| Orifice M5   | <b>ZS-48-A</b>     | To prevent the effects of water collision with inertia force Dimensions (Refer to page 32.) |

IO-Link Compatible (1 Output)



RoHS

IP65

3-Screen Display High-Precision

Digital Pressure Switch for General Fluids

# ZSE20C(F)-L/ISE20C(H)-L Series

For 2 outputs + analog output type,  
refer to page 25.

## How to Order



For Positive Pressure

ISE20C - L - M - 02

For Vacuum/  
Compound Pressure

ZSE20C - L - M - 02

### Rated pressure range

|         |               |
|---------|---------------|
| ISE20C  | -0.1 to 1 MPa |
| ISE20CH | -0.1 to 2 MPa |

1 2 3 4 5 6 7 8

### 1 Rated pressure range

|         |                 |
|---------|-----------------|
| ZSE20C  | 0 to -101 kPa   |
| ZSE20CF | -100 to 100 kPa |

### 2 Output specification

| Symbol | Description  |
|--------|--|
| L      | IO-Link/Switch: 1 output ⇐<br>(PNP or NPN switching type for<br>switch output) |

### 7 Option 2

\* Note that the optional parts that can be used vary depending  
on the piping direction.

| Symbol | Description |
|--------|-------------|
| Nil    | None        |

### 3 Unit specification

| Symbol | Description                                    |
|--------|--|
| Nil    | Units selection function*1                     |
| M      | SI units only*2                                |
| P      | Units selection function (Initial value psi)*1 |

\*1 Under the New Measurement Act, switches  
with the units selection function are no  
longer allowed for use in Japan.

\*2 Fixed units: kPa, MPa

### 4 Piping specification

| Symbol | Description                  |
|--------|------------------------------|
| 02     | R1/4 (M5 female threaded)    |
| N02    | NPT1/4 (M5 female threaded)  |
| F02    | G1/4 (M5 female threaded)    |
| C01    | Rc1/8                        |
| A2     | URJ1/4 (Face seal fitting)   |
| B2     | TSJ1/4 (Compression fitting) |

### Rear ported (5 Piping direction: Nil)

| Symbol | Description                                     | Symbol | Description         |
|--------|---|--------|---------------------|
| A1     | Bracket A                                       | B      | Panel mount adapter |
| D      | Panel mount adapter +<br>Front protection cover |        |                     |

### Bottom ported (5 Piping direction: L)

| Symbol | Description                                     |
|--------|---|
| A3     | Bracket C                                       |
| E      | Panel mount adapter                             |
| F      | Panel mount adapter +<br>Front protection cover |

### 5 Piping direction

|     |               |
|-----|---------------|
| Nil | Rear ported   |
| L   | Bottom ported |

### 6 Option 1

| Symbol | Description  |
|--------|--|
| Nil    | Without lead wire  |
| W      | Lead wire with connector, 5-core<br>(2 m lead wire, With waterproof cover) |

\* For the lead wire with M12 connector,  
refer to page 43.

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                                     | Part no.    | Note  |
|---|-------------|---|
| Bracket A                                       | ZS-46-A1    | For rear ported/Tapping screw: Nominal size 3 x 8 L (2 pcs.)    |
| Bracket C                                       | ZS-46-E     | For bottom ported/Tapping screw: Nominal size 3 x 10 L (2 pcs.) |
| Panel mount adapter                             | ZS-46-B     | Rear ported   |
| Panel mount adapter +<br>Front protection cover | ZS-35-B     | Bottom ported   |
| Panel mount adapter +<br>Front protection cover | ZS-46-D     | Rear ported   |
| Panel mount adapter +<br>Front protection cover | ZS-35-E     | Bottom ported   |
| Lead wire with connector                        | ZS-46-5F    | 5-core, 2 m, Waterproof (With waterproof cover)                 |
| Lead wire with M12 connector                    | ZS-46-5FM12 | Made to order (Refer to page 43.)                               |
| Front protection cover                          | ZS-27-01    | Rear ported   |
| Front protection cover                          | ZS-35-01    | Bottom ported   |
| Adapter with restrictor Rc1/4                   | ZS-31-X175  | To prevent the effects of water collision with inertia force    |
| Adapter with restrictor NPT1/4                  | ZS-31-X186  | Dimensions (Refer to page 32.)                                  |
| Adapter with restrictor Rc1/8                   | ZS-31-X188  |   |
| Orifice M5                                      | ZS-48-A     | To prevent the effects of water collision with inertia force    |
|   |             | Dimensions (Refer to page 32.)                                  |

### 8 Option 3

| Symbol | Operation manual*3 | Calibration certificate*3 |
|--------|--------------------|---------------------------|
| Nil    | ○                  | —                         |
| Y      | —                  | —                         |
| K      | ○                  | ○                         |
| T      | —                  | ○                         |

\*3 All texts are in both English and Japanese.