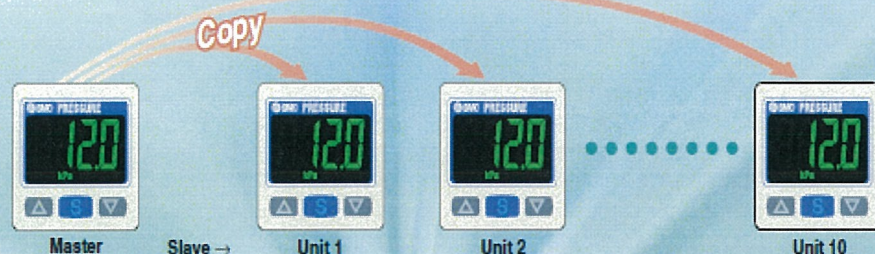


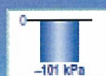
## Settings can be copied to up to 10 slave sensors at once.

The settings of the master sensor can be copied to the slave sensors.

- Reduced setting efforts
- Reduced chance of set-value input error

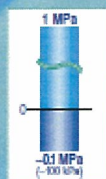


## 3-step setting



Added vacuum range.

- Rated pressure range: 0.0 to -101.0 kPa



Expanded pressure range for positive-pressure type to the vacuum range.

- Rated pressure range: -0.100 to 1.000 MPa

## 2 added outputs

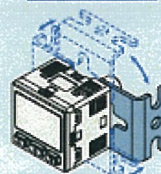
- NPN or PNP open collector 2 outputs
- NPN or PNP open collector 1 output + Analog output (1 to 5 V or 4 to 20 mA)



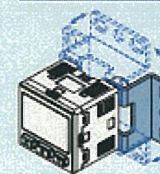
## Mounting

Bracket configuration allows mounting in four orientations.

### Bracket A

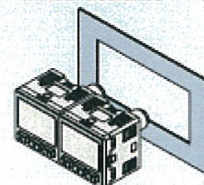


### Bracket B/C



### Panel mount

Mountable side by side without clearance

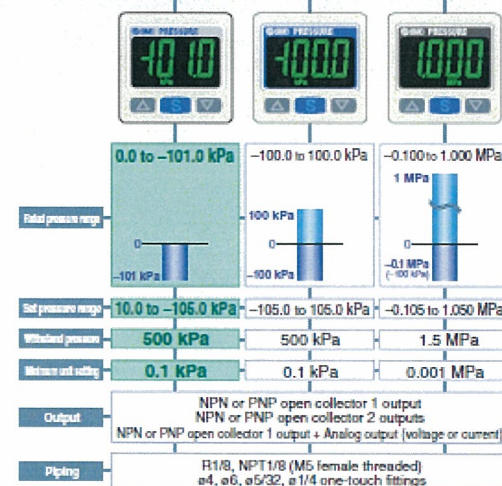


One opening!

- Reduction of panel-cut job
- Space-saving

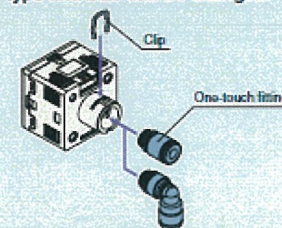
## Series

Series      ZSE30A (vacuum)      ZSE30AF (compound)      ISE30A (positive)



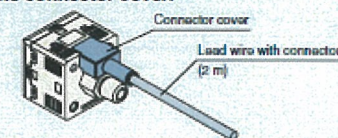
## Replaceable one-touch fittings

The clip type allows easy removal of fittings. Fitting's type and size can be changed.



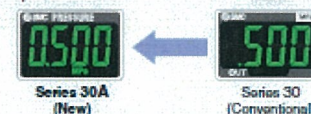
## Lead wire

Added the connector cover.



## 4-digit display

4-digit display allows easy reading of displayed values. Example: 0.5 MPa



## Possible to check set-value during key locking

## Additional functions

- ◆ **Secret code setting function**  
The key locking function keeps unauthorized persons from tampering with buttons.
- ◆ **Power-saving function**  
Power consumption is reduced by turning off the monitor. (Reduce power consumption by up to 20%.)
- ◆ **Resolution-switch function**  
It reduces the monitor to flicker.
- ◆ **MPa/kPa switch function**  
Vacuum, compound and/or positive pressure can be displayed in MPa or kPa.





For positive pressure

For vacuum/compound pressure

ISE30A - \*\* - \*\* - \* \* \* \*  
ZSE30A - \*\* - \*\* - \* \* \* \*

Pressure range

	New part No.	Old part No.
For positive pressure	ISE30A	ISE30
For compound pressure	ZSE30AF	ZSE30
For vacuum	ZSE30A	-

Piping specifications

	New part No.	Old part No.
R1/8 (M5 female threaded)	01	
NPT1/8 (M5 female threaded)	N01	T1
One-touch fitting Φ4 mm	C4H	
One-touch fitting Φ5/32 inch		
One-touch fitting Φ6 mm	C6H	
One-touch fitting Φ1/4 inch	N7H	
One-touch fitting Φ4 mm	C4L	
One-touch fitting Φ5/32 inch		
One-touch fitting ϕ6 mm	C6L	
One-touch fitting Φ1/4 inch	N7L	

Output specifications

	New part No.	Old part No.
NPN 1 Output	N	25
PNP 1 Output	P	65
Analog 1-5V Output	-	26
Analog 1-5V Output + NPN 1 Output	C	
Analog 1-5V Output + PNP 1 Output	E	
Analog 4-20mA Output	-	28
Analog 4-20mA Output + NPN 1 Output	D	
Analog 4-20mA Output + PNP 1 Output	F	

Option 3

Operation manual	Calibration certificate	New part No.	Old part No.
○	-	Nil	
-	-	Y	-
○	○	K	-
-	○	T	-

Option 2

	New part No.	Old part No.
N/A	Nil	
Bracket	A1	A
Panel mounted	B	
Panel mounted Front protection cover	D	

Option 1

	New part No.	Old part No.
Without lead wire	Nil	
Lead wire with connector	L	

Unit specifications

	New part No.	Old part No.
With unit display switching function	Nil	
SI units fixed	M	

※Optional Part No.

Option	New part No.	Old part No.
Lead wire with connector	ZS-38-3L	ZS-27-A
Bracket A	ZS-38-1	ZS-27-B
Bracket B	ZS-38-A2	-
Panel mounted adapter	ZS-27-C	
Panel mount adapter + front protection cover	ZS-27-D	
Front protection cover	ZS-27-01	

## Comparison of Specifications

Item			New specifications (Z/ISE30A (F) Series)	Old specifications (Z/ISE30 Series)
Rated pressure range	For positive pressure		-0.100~1.000MPa	0.000~1.000MPa
	For compound pressure		-100.0~100.0kPa	
	For vacuum		0~-101.0kPa	—
Proof pressure	For vacuum and compound pressure		500kPa	
	For positive pressure		1.5MPa	
Display	Display method		4 digits	3 and 1/2 digits
	Display color		2 colors (green/red)	
	Indicator light		OUT1 : Green	
	Setting min. unit	For vacuum/compound pressure	0.1kPa	0.2kPa
		For positive pressure	0.001MPa	
Display accuracy	For vacuum/compound pressure		±2%F. S. ±1digit	±2%F. S. ±2digit
	For positive pressure		±2%F. S. ±1digit	
Repeatability	For vacuum/compound pressure		±0.2%F. S. ±1digit	±0.2%F. S. ±2digit
	For positive pressure		±0.2%F. S. ±1digit	
Temperature characteristics			±2%F. S.	
Switch output response time			2.5ms	
	Chattering preventing function provided		Selectable among 20, 100, 500, 1000 and 2000ms	Selectable among 20, 160, 640 and 1280ms
Hysteresis	Hysteresis mode		Variable from 0	
	Window comparator mode			
Enclosure			IP40	
Standard			CE UL/CSA RoHS	

### <Comparison of Lead Wire Specifications>

Item		New specifications (Z/ISE30A (F) Series)	Old specifications (Z/ISE30 Series)
Part no.		ZS-38-3L (For 1 output)	ZS-27-A
Number of connector pin		4	3
Conductor	O. D.	$\phi 0.51$	$\phi 0.58$
Insulation	O. D.	$\phi 1.00$	$\phi 1.12$
Sheath	O. D.	$\phi 3.4$	
Dimensions			
Lead wire color	DC (+)	Brown	
	DC (-)	Blue	
	OUT1	Black	

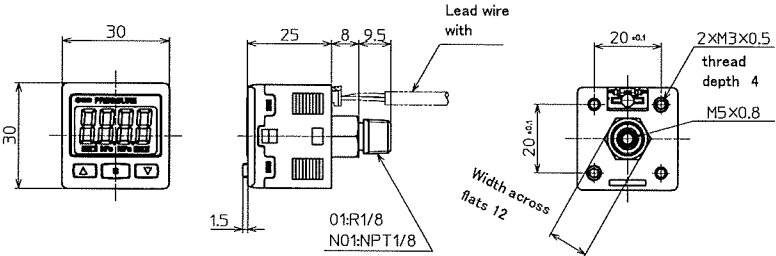
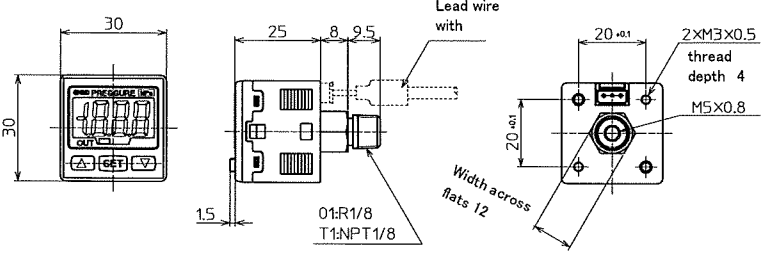
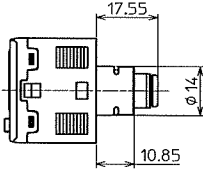
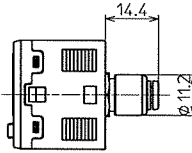
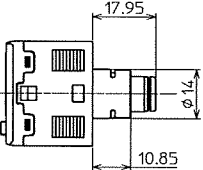
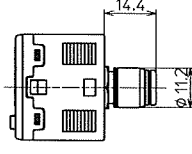
# <Comparison of Switch Output Specifications>

		New specifications (Z/ISE30A (F) Series)	Old specifications (Z/ISE30 Series)
Hysteresis mode	Normal Open (normal display) output	<p>ON</p> <p>OFF</p> <p>Pressure →</p> <p><math>P_1</math> <math>P_2</math></p> <p><math>H_1</math> <math>H_2</math></p>	<p>ON</p> <p>OFF</p> <p>Pressure →</p> <p><math>P_1</math></p> <p>H</p>
		Enter the pressure value for ON point in $P_1$ ( $P_2$ ) and set hysteresis $H_1$ ( $H_2$ ).  * $P_2$ and $H_2$ are for when using 2 outputs.	Enter the pressure value for ON point in $P_1$ and set hysteresis H.
	Normal close (reverse display) output	<p>ON</p> <p>OFF</p> <p>Pressure →</p> <p><math>n_1</math> <math>n_2</math></p> <p><math>H_1</math> <math>H_2</math></p>	<p>ON</p> <p>OFF</p> <p>Pressure →</p> <p><math>n_1</math></p> <p>H</p>
		Enter the pressure value for ON point in $n_1$ ( $n_2$ ) and set hysteresis $H_1$ ( $H_2$ ).  * $n_2$ and $H_2$ are for when using 2 outputs.	Enter the pressure value for OFF point in $n_1$ and set hysteresis H.
		e.g. The setting value when shifting from ISE30 to ISE30A. $n_1$ : 0.470      * $n_1$ of Z/ISE30A is equivalent to $H$ : 0.030      ( $[n_1] - H$ ) of Z/ISE30.	$n_1$ : 0.500 $H$ : 0.030

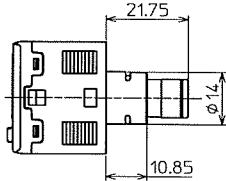
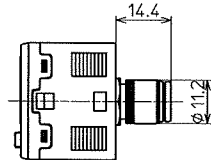
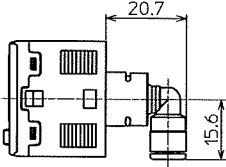
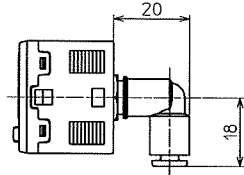
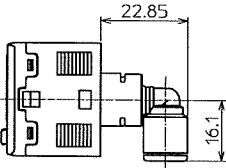
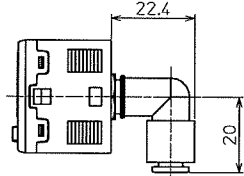
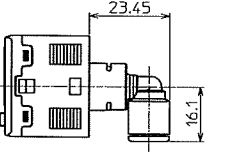
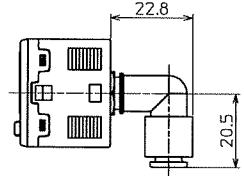
# <Comparison of Switch Output Specifications (continued)>

		New specifications (Z/ISE30A (F) Series)	Old specifications (Z/ISE30 Series)
Window comparator mode	Normal Open (normal display) output		
		<p>Enter the pressure value for <u>ON</u> point on the low pressure side in P1L (P2L) and enter the pressure value for <u>ON</u> point on the high pressure side in P1H (P2H), and set hysteresis H1 (H2).</p> <p>* P2L, P2H and H2 are for when using 2 outputs.</p> <p>e.g. The setting value when shifting from ISE30 to ISE30A  P1L : 0.400  P1H : <u>0.570</u>    ※P1H of Z/ISE30A  H1 : 0.030    is equivalent to  ( [P_2] - H ) of</p>	<p>Enter the pressure value for <u>ON</u> point on the lower pressure side in P_1 and enter the pressure value for <u>OFF</u> point on the higher pressure side in P_2, and set hysteresis H.</p> <p>P_1 : 0.400  P_2 : <u>0.600</u>  H : 0.030</p>
	Normal close (reverse display) output		
		<p>Enter the pressure value for <u>ON</u> point on the lower pressure side in n1L (n2L) and enter the pressure value for <u>ON</u> point on the higher pressure side in n1H (n2H), and set hysteresis H1 (H2).</p> <p>* n2L, n2H and H2 are for when using 2 outputs.</p> <p>e.g. The setting value when shifting from ISE30 to ISE30A.  n1L : <u>0.370</u>    ※n1L of Z/ISE30A  n1H : 0.600    is equivalent to  H : 0.030    ( [n_1] - H ) of Z/ISE30.</p>	<p>Enter the pressure value for <u>OFF</u> point on the lower pressure side in n_1 and enter the pressure value for <u>ON</u> point on the higher pressure side in n_2, and set hysteresis H.</p> <p>n_1 : <u>0.400</u>  n_2 : 0.600  H : 0.030</p>

# <Comparison of Outer Dimensions>

Piping specifications	New specifications (Z/ISE30A(F)Series)	Old specifications (Z/ISE30 Series)
<p>01/N01 R1/8 NPT1/8</p>		
<p>C4H One-touch fitting Φ4 mm φ 5/32 inch</p>		
<p>C6H One-touch fitting φ 6mm</p>		

- Product outer dimensions (One-touch fitting is replaceable, so the dimensions are different.)

Piping specifications	New specifications (Z/ISE30A(F)Series)	Old specifications (Z/ISE30 Series)
<p>N7H One-touch fitting <math>\phi</math> 1/4inch</p>		
<p>C4L One-touch fitting <math>\phi</math> 4mm <math>\phi</math> 5/32inch</p>		
<p>C6L One-touch fitting <math>\phi</math> 6mm</p>		
<p>N7L One-touch fitting <math>\phi</math> 1/4inch</p>		



## <Instruduction for connecting a lead wire with a connector to the Z/ISE30A>

Digital pressure switch:

Z / I S E 3 0 A \* - \* - X 5 5 5

Lead wire with connector:

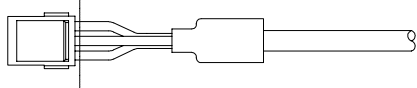
Z S - 3 8 - 4 L ( A ) ( B ) - X 5 5 5

These instrudctions indicate the connection procedure for connecting the lead wire with the connector for the Z/ISE30 series digital pressure switch to the Z/ISE30A series.

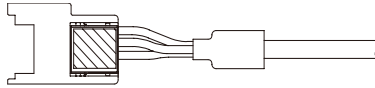
### [Connection procedure details]

Cut off the lead wire with the connector for the Z / I S E 3 0 series and connect it to the relay connector.

Cut at this point.

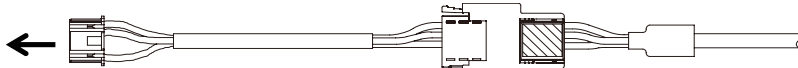


Relay connector connected



The relay connector connected to the lead wire with connector attached to the product.

To the  
Z/ISE30A



### [Relay connector attached to the product]

Two relay connectors are available and one of two relay connectors is enclosed with the product for which you have ordered.

Z/ISE30A-\* -N/P-\* -X555

ZS-38-4LA-X555



Z/ISE30-\* -C/D/E/F-\* -X555

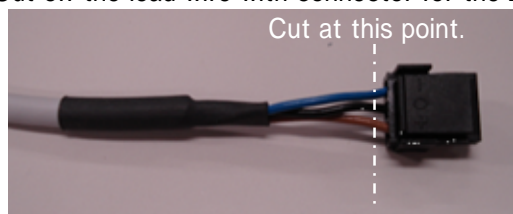
ZS-38-4LB-X555



The respective terminal colors are different.

### [Connecting procedure for the relay connector]

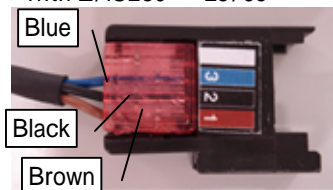
1. Cut off the lead wire with connector for the Z/ISE30 series digital pressure switch..



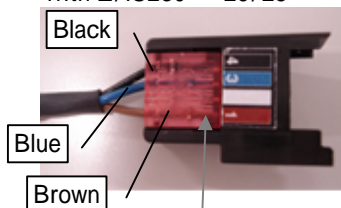
2. Insert the cut lead wires, into the appropriate colors of the relay connector and push the red resin in the black resin.

- Insert the lead wires until they touch the end. (Approx. 10mm)
- The red resin and the black resin of the relay connector should be level.

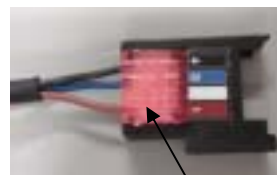
With Z/ISE30-\* -25/65-\*



With Z/ISE30-\* -26/28-\*



The lead wires are inserted to the end.



<Bad example>

The lead wires are not inserted to the end.

3. Engage the lead wire with connector attached. This completes the process.