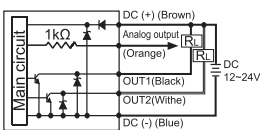


Display Digital Pressure Sensor

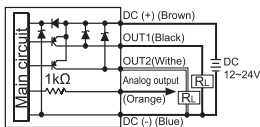


B. OUTPUT CIRCUIT WIRING DIAGRAMS

2NPN+Analog output(1~5V)



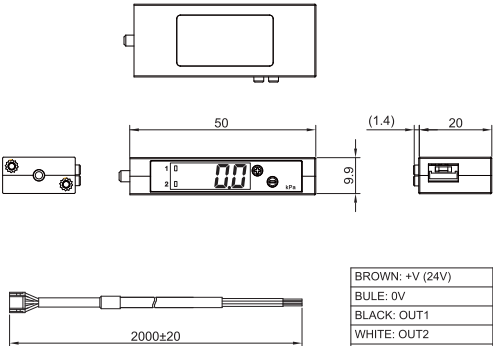
2PNP+Analog output(1~5V)



C. ORDERING INFORMATION

Model
ZK15-VGVE-PNP-C6-24LZD
ZK15-VGVE-PNP-C8-24LZD
ZK15-VGVE-NPN-C6-24LZD
ZK15-VGVE-NPN-C8-24LZD

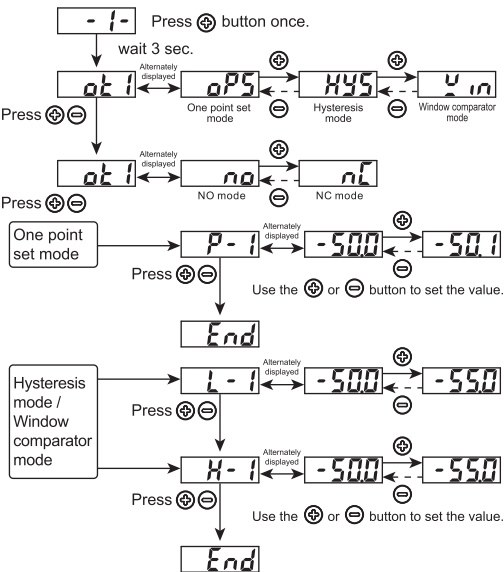
D. DIMENSIONS



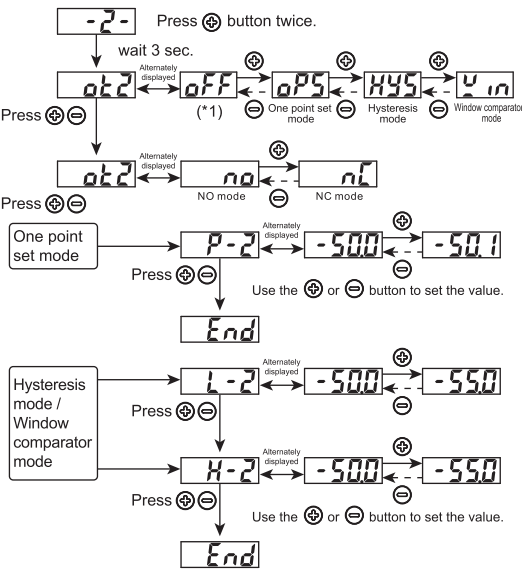
Unit:mm

E. INITIAL SETTING MODE

1 OUT1 type setting



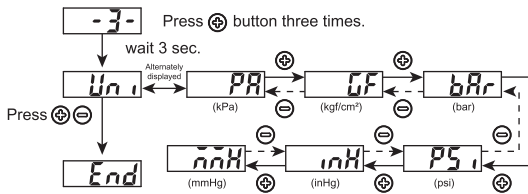
2 OUT2 type setting



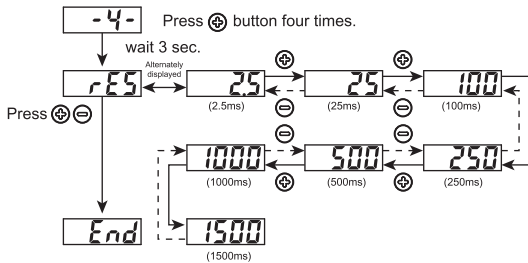
【NOTE】

*1 When OUT2 Setting "oFF" directed end.

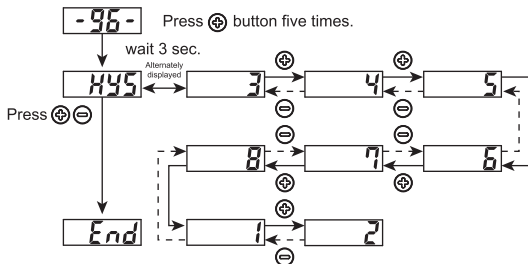
3 Unit setting



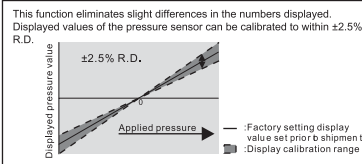
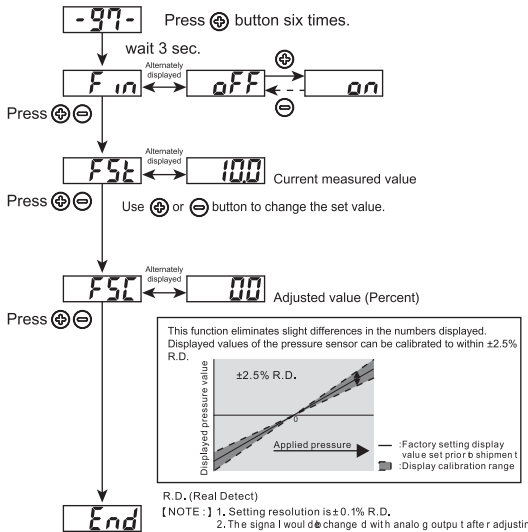
4 Response time setting



5 Fixed hysteresis value selection



6 Display fine adjustment mode

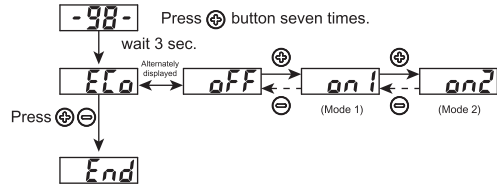


R.D. (Real Detect)

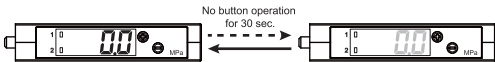
【NOTE】1. Setting resolution is ±0.1% R.D.
2. The signal would change with analog output after adjusting.

7 Power-Save mode

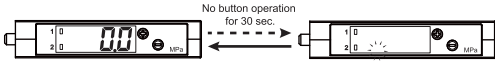
- During Power-Save mode, the main display will turned off if no buttons is pressed after 30 seconds.
- During Power-Save mode, the output LCD may not be synchronize with the output. It is normal and will not affect output operation.
- Press any button to turn-on main display temporarily.



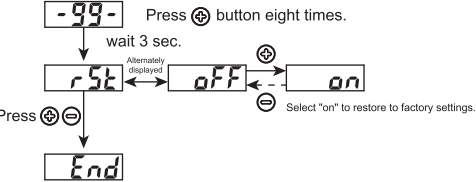
Mode 1
The brightness of the display is reduced.



Mode 2
Only the decimal point flashes.

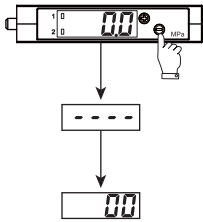


8 Restore factory setting



F. ZERO POINT SETTING

Press $\ominus$ button for more than 3 sec. until "00" is shown.

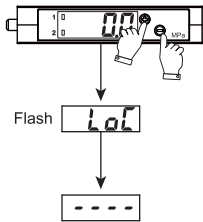


※Zero resetting is possible only with an atmospheric pressure equivalent to 3% or less of F.S.

G. KEY LOCK MODE

Key lock mode can prevent operation mistakes.

Press $\oplus$ button and $\ominus$ button at the same time for 3 sec.

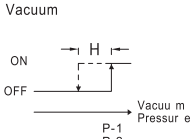


※Unlock setting : Press $\oplus$ button and $\ominus$ button at the same time until the "Unl" is displayed.

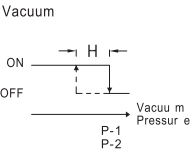
H. OUTPUT TYPE

(1) One point set mode:

Normal open mode

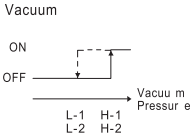


Normal close mode

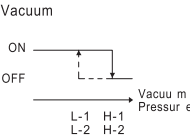


(2) Hysteresis mode:

Normal open mode

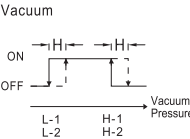


Normal close mode

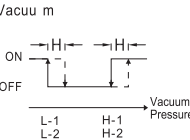


(3) Window comparator mode:

Normal open mode



Normal close mode

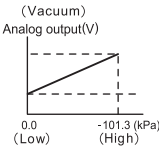


[NOTE :]

- *1. In case hysteresis is set at less than or equal to 2 digits, switch output may chatter if input pressure fluctuates near the set point.
- *2. When using window comparator mode, the difference between two set points must be greater than the fixed hysteresis, otherwise will cause the switch output to malfunction.

I. ANALOG OUTPUT DESCRIPTION

Analog output range 1 to 5V , proportional to the pressure range.



J. PRESSURE UNIT CONVERSION TABLE

From	To	Pa	kPa	MPa	kgf/cm ²	psi	bar	inHg
1 Pa			0.001	0.000001	0.000010197	0.000145038	0.00001	0.0002953
1 kPa	1000.000	1		0.001000	0.010197	0.145038	0.010000	0.2953
1 MPa	1000000	1000	1		10.197	145.038	10	295.2998
1 kgf/cm ²	98066.5	98066.5	98.0665	0.0980665	1	14.2233	0.980665	28.95979
1 psi	6895	6895	6.895	0.006895	0.07031	1	0.06895	2.036074
1 bar	100000.0	100.000	0.100000	1.01972	14.5038	1		29.52998
1 inHg	3386.388	3386.388	3.386388	0.003386	0.034530	0.491141	0.033863	1

K. ERROR CODE INSTRUCTION

Error Type	Error code	Error Condition	Troubleshooting
Excessload current error	Err1	Output 1 load current is more than 125 mA	Turn power off and check the cause of overload current or lower the current load under 125 mA, then restart.
	Err2	Output 2 load current is more than 125 mA	
Residual pressure error	Errr	During zero reset, ambient pressure is over ±3% F.S.	Change input pressure to ambient pressure and perform zero reset again.
Applied pressure error	FFF	Supply pressure exceeds the upper limit of pressure setting.	Adjust the pressure within operating pressure range.
	-FF	Supply pressure exceeds the lower limit of pressure setting.	
System error	Err4	Internal system error Internal data error	Turn power off, and then restart. If error condition remains, please return to factory for inspection.