

CHELIC®

PST2 series pressure sensor with digital display

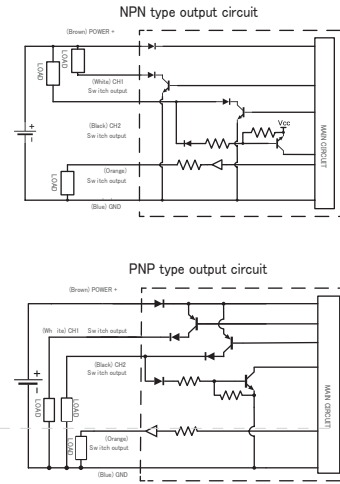
Precautions for using this product:

1. DO NOT use it in corrosive and flammable gas or any liquid.
2. Use it in the given voltage range set in the specification table. Otherwise, the product may get damaged and result in malfunction.
3. Keep this product from impact or falling from high above when installing it. Otherwise, the product may get damaged and result in malfunction.
4. Power off before connecting this product to any circuit control system. Otherwise, any invalid wiring or short circuit may cause this product damage.
5. DO NOT use this product in a wet environment or with oil mist.
6. This series of products comes without explosion resistance verification. DO NOT use it in environment with explosive gas or dust.
7. DO NOT bundle wires of this product with power cords or other high-voltage cables or it may underperform due to interference by noise.

A. Specification

Model		PST2
Rated pressure range		-100.0~100.0kPa
Set pressure range		-100.0~100.0kPa
Pressure resistant		500kPa
Applicable gas		Air, non-corrosive, inflammable
Pressure unit Set minimum scale	kPa	0.1
	kgf/cm ²	0.01
	bar	0.01
	psi	0.01
	inHg	0.1
	mmHg	1
Voltage		12 or 24V DC±10%, ripple peak (P-P) 10% or less
Consumption current		≤40mA (null load)
Switch Output	Output mode	2NPN or 2PNP open collector output
	Maximum load current	80mA
	Voltage of input power	24VDC
	Internal voltage	≤1.5V
	Reaction time	≤2.5ms (Featuring malfunction proof: 25ms,100ms,250ms,500ms, 1000ms and 1500ms optional)
Output short circuit protection		None
Linear analog output	Voltage Output	1~5V ±2.5% F.S.
	load impedance	About 1kΩ
	Linearity	±1% F.S.
Display	Display	4-digit, 7-step display (green)
	Action indicator	OUT1 green/OUT2 green
	Update time	About 0.2 seconds
	Display accuracy	±2% F.S.±1 digit (with ambient temperature: 25±3°C)
Repeat accuracy		±0.2% F.S.±1 digit
Withstand voltage	Protection level	IP40
	Working environment temperature	0~50°C
	Storage environment temperature	-10~50°C (without condensing and icing)
	Ambient humidity	Act and storage: 35~85% RH (without condensing)
	Withstand voltage	1000VAC for 1 minute (between lead wire and plastic casing)
	Insulation impedance	Above 50MΩ (500V DC) (between lead wire and plastic casing)
	Vibration resistant	1.5mm complex amplitude (10Hz~150Hz~10Hz every minute) X,Y,Z,2 hours in each direction
Shock proof	980m/s ² (100G),X,Y,Z 3 tries in each direction	
Temperature characteristics		±2% F.S. Comparison reference temperature 25°C (within 0~50°C temperature range)
Wire specifications		Oil resistant PVC wire (0.14mm)
Weight		About 33g (including one piece of wire 1 meter long)

B. Output circuit wiring diagram



C. Ordering information

P S T 2 C - N

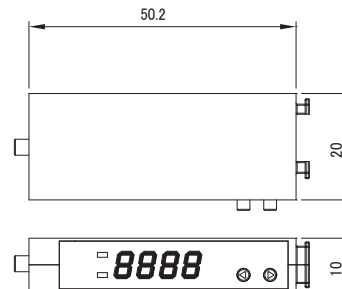
C: Compound (-101.0~101.0kPa)

Pressure type

Output type

N: 2NPN output analog output (1~5V)
P: 2PNP output analog output (1~5V)

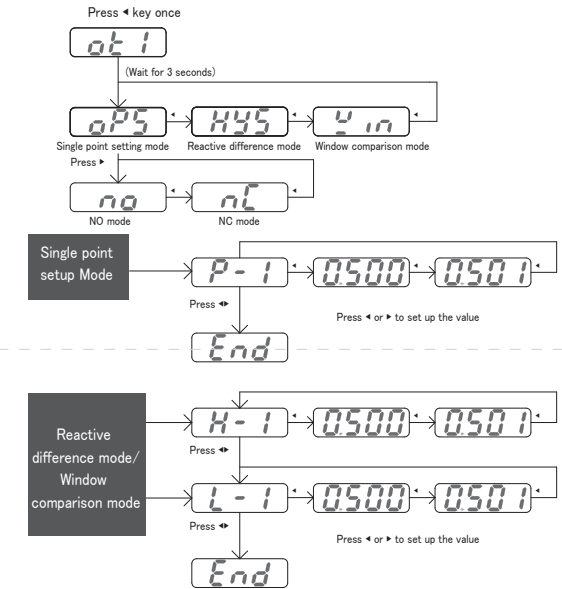
D. Dimension



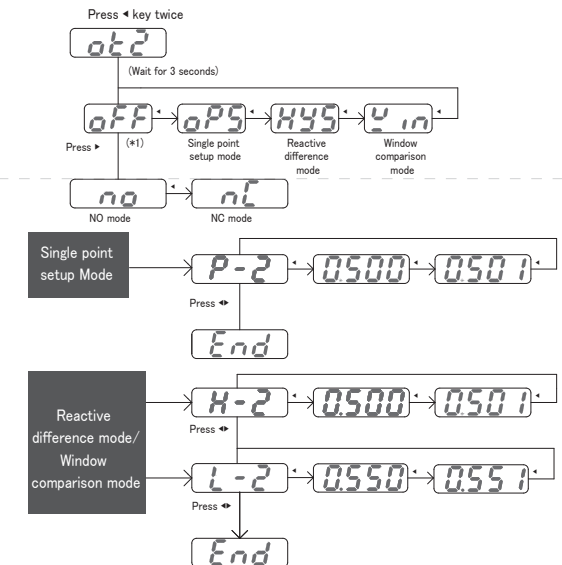
Brown:	DC24V
White:	OUT1
Black:	OUT2
Orange:	ANALOG 1~5V
Blue:	GND

E. Initial setting mode

1. OUT1 type setup



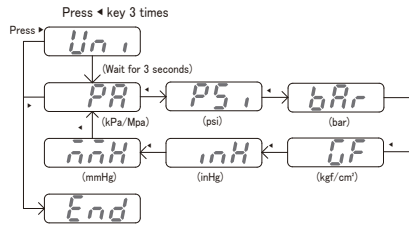
2. OUT2 type setup



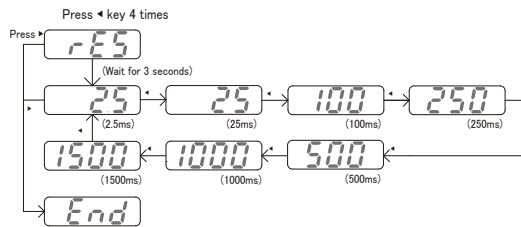
[Note] *1 Set OUT2 to "oFF" to switch to END to exit.

E. Basic setup mode

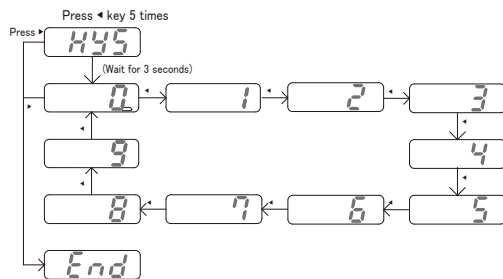
3. Unit setup



4. Response time setup

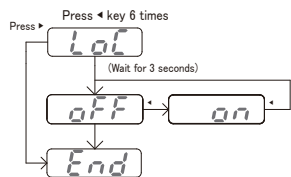


5. Fixed reactive difference setup



6. Key lock mode

This mode is aimed to prevent invalid key pressing.

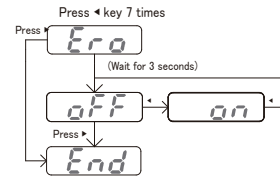


* Press and hold key

Until 'Un1' displays to unlock it.

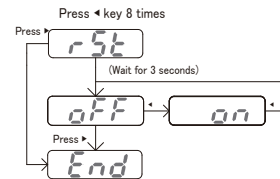
E. Basic setup mode

7. Reset setup

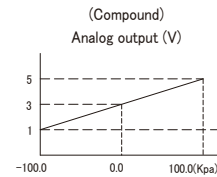


* Set scope of reset at or less than 3% F.S.

8. Reset to factory default



F. Linear analog output description



G. Pressure unit conversion table

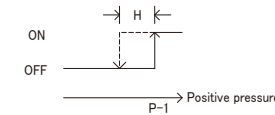
From \ TO	Pa	kPa	MPa	kgf/cm ²	psi	bar	inHg
1Pa	1	0.001	0.000001	0.000010197	0.000145038	0.00001	0.0002953
1kPa	1000.000	1	0.0010000	0.010197	0.145038	0.01000	0.2953
1MPa	1000000	1000	1	10.197	145.038	10	295.2998
1kgf/cm ²	98066.5	98.0665	0.0980665	1	14.2233	0.980665	28.95979
1psi	6895	6.895	0.006895	0.07031	1	0.06895	2.036074
1bar	100000.0	100.0000	0.100000	1.01972	14.5038	1	29.52998
1inHg	3386.388	3.386388	0.003386	0.034530	0.491141	0.033863	1

H. Output type

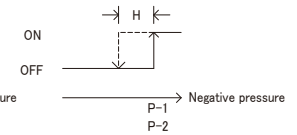
(1) Single point setup mode

(Normally open mode)

Positive / Compound

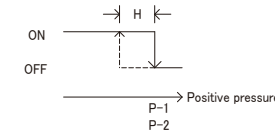


Negative pressure

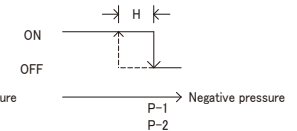


(Normally closed mode)

Positive / Compound



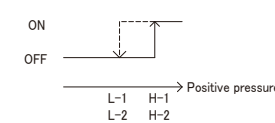
Negative pressure



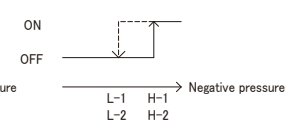
(2) Reactive difference mode

(Normally closed mode)

Positive / Compound

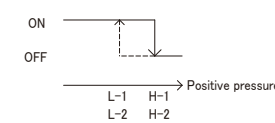


Negative pressure

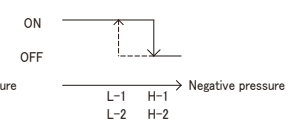


(Normally closed mode)

Positive / Compound



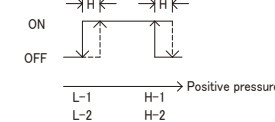
Negative pressure



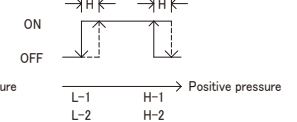
(3) Window comparison mode

(Normally closed mode)

Positive / Compound

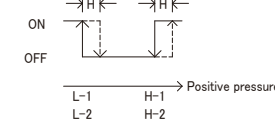


Negative pressure

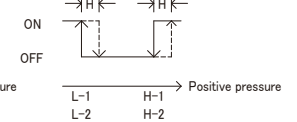


(Normally closed mode)

Positive / Compound



Negative pressure



Note:

*1. Regarding reactive difference mode: in case fixed pressure value is set close to 2 digits, the pressure sensor may suffer malfunction.

*2. Regarding window comparison mode: please set the difference between 2 points greater than fixed pressure value or the pressure sensor output may fail.