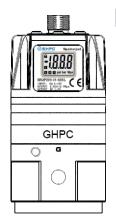


# **OPERATION MANUA**

## **ER2P REGULATOR**



Safety instructions
Wiring method
Setting method
Error indication function
Technical specifications

### Safety instructions



### WARNING operator error could result in serious injury or loss of life

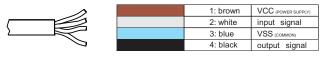
- 1.Whether this product is applicable should be determined by designer or senior person of air pressure system.
- $2. This \ product \ should be \ performed \ by \ knowledgeable \ and \ experienced \ operator, it is very \ dangerous \ to \ error \ operate \ compressed \ air.$
- 3.Do not operate the equipment or remove the components until safety is confirmed, regular inspection should be taken to ensure the proper operation.

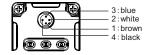


#### WARNING operator error could result in injury or equipment damage

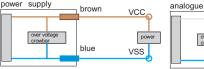
- 1.If power to this product is cut off due to power failure, etc. when it is in a controlled state, residual pressure will be retained temporarily.
- 2. The optional cable connector is a 4 wire type, when the monitor output (analogue output or switch output) is not being used, prevent it from touching the other wires as a malfunction could occur.
- 3. This product is adjusted for each specification at the time of shipment from the factory. Avoid careless disassembly or removal of parts, as this can lead to malfunction.
- 4. Take the following steps to avoid malfunction due to noise:
  - ①Install a line filter etc. to the AC power line to reduce/eliminate power supply noise.
- ②Avoid malfunction due to noise by installing this product and its wiring away from strong electric fields, such as those of motors and power line.etc.
- ③Be sure to implement protective measures against load surge for induction loads (solenoid valves, relays, etc).
- **Turn off the power supply before installing and removing the connector.**
- 5. Please note that the right angled cable connector does not rotate and is limited to only one entry direction

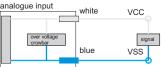
### Wiring method

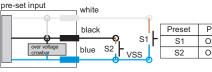




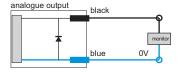
Note: the wire color is when optional cable is used

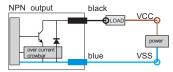


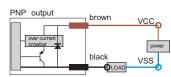




.	Preset	P_1	P_2	P_3	P_4
H	S1	OFF	ON	OFF	ON
	S2	OFF	OFF	ON	ON





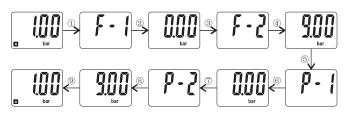


## Setting method

Key to unlock



Analog input signal type setting of min. pressure, max. pressure

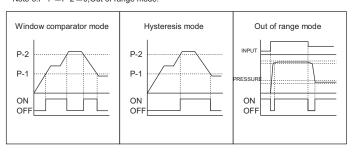


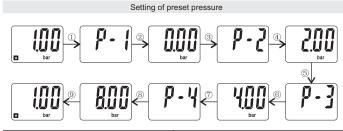
Unlock keys and press S key	2. Set the minimum pressure F-1 by using	▼ ▲ key	
Press S key to save data	4. Set the maximum pressure F-2 by using	▼ ▲ key	
5. Press S key to save data, (P-1\P-2 only used in switch out products)			
6. Set the pressure P-1 by using key	7. Press S key to save data		
8. Set the pressure P-2 by using  key	9. Press S key to save data		

Note 1: F-1 is adjustable in a range from 0% to 90% of rated value.

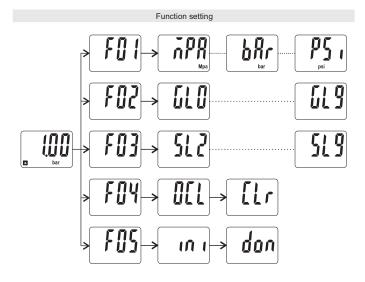
Note 2: F-2 is adjustable in a range from 10% to 100% of the rated value. Note 3: (F-2) - (F-1)  $\geq$  10 % F.S. Note 4: P-1 < P-2, Window comparator mode. Note 5:P-1  $\geq$  P-2, Hysteresis mode.

Note 6:P-1 =P-2=0,Out of range mode





Unlock keys and press S key	2. Set the minimum pressure P-1 by using	▼ ▲ key
3. Press S key to save data	4. Set the maximum pressure P-2 by using	▼ ▲ key
5. Press S key to save data	6. Set the maximum pressure P-3 by using	▼ ▲ key
7. Press S key to save data	8. Set the maximum pressure P-4 by using	▼ ▲ key
9. Press S key to save data / return to pressure display		



Unlock keys and press S key for 2 seconds to function setting			
F01 Unit setting			
Select F01, press S key, to unit setting.			
Select Bar, Mpa, psi by using  keys, and press  key to save data.			
F02 response setting			
Select F02, press s key, to response setting.			
Select GL0÷GL9 by using  keys, and press  key to save data.			
The gain is changed when sharp fluctuations in output pressure.			
F03 error setting			
Select F03, press S key, to error setting			
Select SL2÷GL9 by using ▼ ▲ keys, and press Skey to save data.			
The gain is changed when sharp fluctuations in output pressure.			
F04"Zero clear" setting			
Select F04, press S key, to "Zero clear" setting			
Press both ▼ ▲ keys until CLR displayed, the adjustable range is within 5% F.S.			
Operate "zero clear" to correct the initial pressure			
F05 Initialize settings			
Select F05, press S key, to initialize settings			
Press both  keys until DON displayed, return to pressure display automatically.			

Error indication function				
NO.	display	Contents of error	countermeasure	
1 Input signal exceeds the rated value range. Reset input signal exceeds the rated range		Reset input signal to within the rated range		
2	8-5	Solenoid valve failure	Contact customer service for maintenance	
3	[-]	Out of range error of zero clear	Error operate, recheck, please operate "zero clear" with in the range of 5% F.S	
4	F-4 Air line failure		Please check if first pressure is supplied and if EXH side and pilot exhaust are blocked;	

#### **Technical Specifications** ER2P2 ER2P4 Model ER2P1 Min. pressure supply Set Pressure: + 0.1Mpa Max. pressure supply 0. 2MPa 1. 0MPa Set pressure range 0,005 ÷ 0,1 MPa 0,005 ÷ 0,5 MPa 0,005 ÷ 0,9 MPa Voltage DC: 24V ± 10% Power supply Current DC24V: 0,12A MAX Current type DC 4÷20mA, DC 0÷20mA Voltage type DC 0÷5V, DC 0÷10V Input Preset type 4 point Current type below 250Ω Input resistance Voltage typ approx. 6.5KΩ Preset type Preset input type 24VDC approx 4.7K Ω DC 1÷5V (load impedance: over 1 K $\Omega$ ) DC 4÷20mA (load impedance: below 250 $\Omega$ ) Output precision within range the range of 6%F.S. Analog output Output Switch NPN-OC output type: 30mA PNP-OC output type: 30mA Linear ± 1% F.S. 0.5% F.S. Hysteresis Repeatability ± 0.5% F.S. ± 2% F.S. Temperature Characteristic Precision ± 2% F.S. Display Division 1000 division Ambient temperature 0÷50 °C Protection class IP 65

#### Reference data of response time

Series	Input signal 50%÷100%			
Series		ER2P1	ER2P2	ER2P4
Without load		0,2 ÷ 0,3 S	0,2 ÷ 0,3 S	0,3 ÷ 0,4 S
With load 1L		0,3 ÷ 0,5 S	0,3 ÷ 0,5 S	0,4 ÷ 0,5 S

