

# NPG SERIES POSITION TRANSMITTER

**Liquid Crystal Display** 



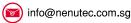
### **NENUTEC ASIA PACIFIC PTE LTD**

7030 Ang Mo Kio Ave 5 #03-56 Northstar @ AMK Singapore 569 880









# NPG SERIES POSITION TRANSMITTER

**Liquid Crystal Display** 

### **NPG-24**

NENUTEC is proud to present Position Transmitter - NPG 24 designed specifically for applications in the HVAC market.



## **PRODUCT FEATURE**

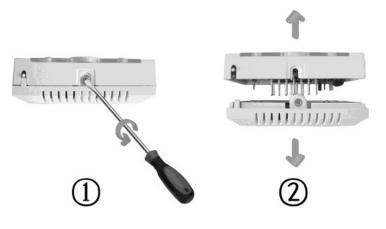
- For control of modulating actuators
- Ultra slim wall-mount unit to match any décor
- Large easy to read Liquid Crystal Display (LCD), with LED backlight
- A stylish bi-directional rotating dial to provide ease of operation
- Adjustable 0-100% setpoint setting in 1% steps
- Provides 0-10 VDC or 2-10 VDC proportional output
- Used as an either high limit or low limit device when its input terminals are connected to a pro-portional controller
- For either 24 V 50/60 Hz or 15-24 VDC supply voltage
- Retain last entered settings of setpoint upon power resumption

# **TECHNICAL SPECIFICATION**

MODEL NUMBER	NPG-24	
OUTPUT RANGE	0-10 VDC or 2-10 VDC, jumper selectable (Factory Default: 0-10 VDC)	
INPUT RANGE	0-10 or 2 -10 VDC	
0(2)-10 VDC OUTPUT IMPEDANCE	Minimum 50,000 $\Omega$	
0(2)-10 VDC INTERNAL IMPEDANCE	Maximum 1,000 Ω	
ELECTRICAL RATING	AC 24V 50/60 Hz ±15%, DC 15-24 V ±10%	
DISPLAY AND SETPOINT RANGE	0 - 100%	
BODY MATERIAL	Material: self-extinguishing, molded ABS	
FINISH	Off white housing and dark gray faceplate	
AMBIENT TEMPERATURE	0°50° C	
AMBIENT HUMIDITY	1090% rH (non Condensing)	
INVENTORY TEMPERATURE	-30°50°C as per IEC 721-3-2	
CERTIFICATION	CE and ISO 9000 (ENrequirements)	
SHIPPING WEIGHT	0.12 kg (0.3 lbs)	

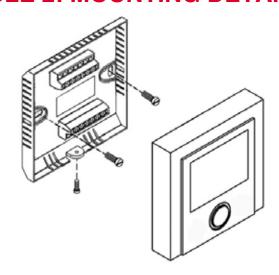


# **TABLE 1: COVER REMOVAL PROCEDURE**



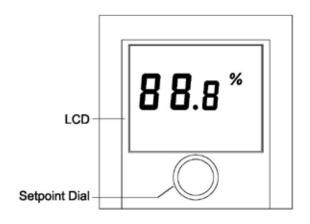
- 1. Loosen the fixed screw.
- 2. Slightly twist the screw driver to crack open the cover from the base.
- 3. Hold the base firmly with one hand and remove the cover with another hand by pulling away from the base forcibly.

# **TABLE 2: MOUNTING DETAILS**



The NPG-24 digital setpoint adjusters are suitable for surface, flush or panel mounting and can be surface mounted or secured to a standard European 75x75x35 mm electrical box. Two mounting screws are included.

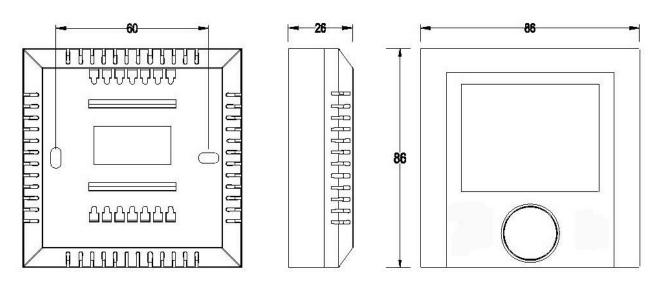
# **TABLE 3: DISPLAY CONTROL UNIT AND LCD LAYOUT**



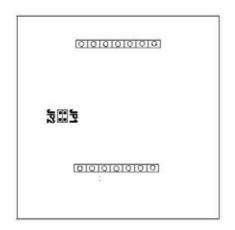
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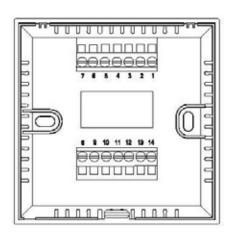
**Liquid Crystal Display** 

### **TABLE 4: DIMENSIONS IN MM**



# **TABLE 5: WIRING TERMINALS AND JUMPER SETTINGS**





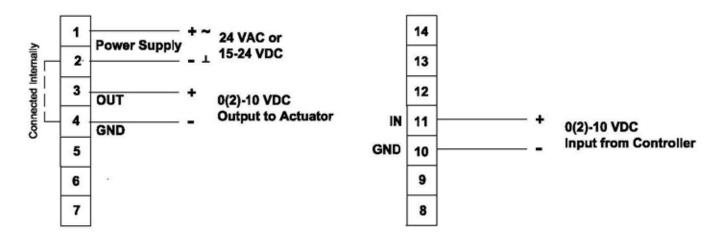
JUMPER SETTINGS			
Jumper Number	Jumper in OPEN Position	Jumper in CLOSED Position	
JP1	High limit setting	Low limit setting	
JP2	For 2-10 VDC output	For 0-10 VDC output	

#### Notes:

- 1. NPG-24 works as a positioning device when JP1 is in closed position and no input signal is connected. This is a factory setting.
- 2. JP2 is available in 0-10 VDC/2-10 VDC output models only. Factory setting is 0-10 VDC.



# **TABLE 6: WIRING DIAGRAM**



#### **WARNING**

Incorrect wiring connection may cause permanent equipment damages to the device.

### **WIRING NOTES**

Run the wiring away from any electrical motors or power wiring. Failure to do so may result in poor transmitter performance due to electrical noise. All wiring must be installed in accordance with local building codes.

### **OPERATION NOTES**

- LCD shows setpoint value constantly.
- Increase or decrease setpoint value by rotating the adjustment dial clockwise or counter-clockwise.
- The backlight will come on for 5 seconds when the rotating dial is turned.

### **IMPORTANT REMARK**

For special requirement, consult your local Nenutec's representative.



This actuator includes electrical and electronic components and may not be disposed as household garbage. Please consider the local valid legislation.



Connect via safety isolating transformer.

To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductor (with at least a 3mm contact gap.)

The performance specifications are nominal and conform to acceptable industry standards. Nenutec shall not be liable for damages resulting from misapplication or misuse of its products.