



**MICROCONTROLLER BASED VALVE POSITIONER  
MODEL 883**

**Technical Catalogue**

**Introduction**

Pantech's new Microcontroller based Valve Positioner, series 883, are designed to control output going to servo valve, with or without the process controller. Model 883 is a panel mounted Control Valve Driving Station, which accepts 4 – 20mA signals from controller and a feedback signal from control valve. The voltages for feedback signal are derived from the instrument itself. The instrument generates UP or DOWN pulses to operate motorised control valve based on the difference between controller output and feedback from control valve. The specially designed circuit drives the instrument in Manual mode, in case of input or feedback failure and locks the valve in its last position. Variable deadband of 0.5% to 5.0% prevents the valve from hunting. Also available is a special feature of delaying the another movement of valve by preset time once it is settled. The instrument has an overriding facility through the valve can be driven up or down manually. The instrument displays valve opening in percentage through 4-digit red LED display. The configurable features in this new version of the valve positioner are as follows :-

- 1.Feedback resistance range remains configurable. You can select any Pot. Value between 100 ohms to 5 kilo ohms. However, the span range ( higher limit input value – lower limit input value ) should atleast be 10% of the Pot. Value. For example, if 1Kohm pot is selected, then there should be atleast 100 ohms value difference between the higher limit and lower limit selected. All configurations by front four keys.
  - 2.Display range configurable accordingly by front keys only.
  - 3.When input breaks, the instrument comes in the MANUAL mode. When no port is connected, the instrument will show OPEN. when input of 4-20 mA breaks, the instrument goes in MANUAL mode.
- The modules incorporate low drift operational amplifiers and industrial grade components. Burn in of each module ensures a long trouble free operation.

**Specifications**

**Input**

- 1) 4 – 20 mA DC
- 2) Feedback resistance from control valve.

**Feedback**

100 (minimum) to 5K (maximum).  
Range is predefined type only

**Output**

UP and DOWN contacts.  
4-20 mA DC isolated, if required.

**Contact ratings**

5 Amp, 230 V AC

**Display range**

Configurable. Factory set : 0-100%

**Display resolution**

4-digit LED

**Deadband satiability**

0.5% to 5% Maximum

**Front controls**

A/M switch, Up, Down.

**LED indications**

Auto, Manual, UP, DOWN

**Display accuracy**

+/- 0.15% of span

**Power supply**

- 230 V AC
- 110 V AC
- 24 V DC (22.5 to 28.0 V DC)

**Power consumption**

6 VA max.

**Ambient temperature**

0 – 50 C.

**Storage temperature**

0 – 70 C.

**Humidity**

90% RH (non-condensing)

**Description of front four keys :**

- First key : DOWN, Move
- Second key : UP
- Third key : A/M, Enter
- Fourth key : FUNCTION, Esc.



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