

# The linear Position Transmitter LPT-012

#### General:

An electronic device called a linear potentiometer gives indication of the position of the slide valve, which can be used by the compressor control system.

The Position Indicator transmitter (LPT) is an electronic contact-less displacement sensor build in a sensorwell.

The LPT convert the position of the slidevalve into a 4 till 20 mA.

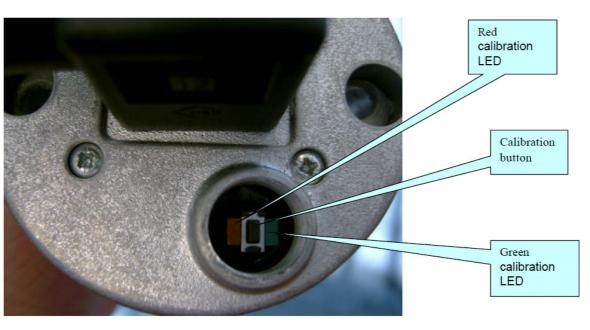
The minimum load position is given by the 4 mA out put. The maximum load position is given by the 20 mA output. An 4 mA output (minimum load position) is required to permit a start.

Use of the 4-20 mA signals is common for many control systems and may be used alone, if required, for all of the control functions for single and multiple compressor installations subject to a suitable control system.

### Connections connection plug:

Wiring Plug Connections	Function
1	Supply Voltage + 24V DC
2	Common – 0 VDC
3	Output Signal 4-20 mA
4	Ground/or not connected

## The LPT Linear Position Transmitter



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#### Calibration

When the Slide is in the unloading position the LPI should indicate 10%.( 4 mA) To verify the setting of the full load 100% switch.

Move the slide to 100% by using the oil pump or if the system is shut down, by using a manual oil pump or air to move the slide valve piston. The full load-100% (20mA) should then be illuminated.

If this isn't the case please do the calibration again.

- 1. Move the piston to the minimum load position.
- 2. Adjust The Vi screw to set the Vi to suit the operating conditions **Note**; adjust only with the slide valve in the minimum load- 10% position and the compressor stopped.
- 3. Remove the calibration button cover, Switch power on and disconnect the plug under the LPI.
- 4. Wait for 2 min. Connect the plug. The red calibration LED will light for 2/3 seconds and then go out. After approximately 20 seconds, the green calibration LED light will start flashing (the min. capacity array may come on).
- 5. Allow **5 minutes** to elapse before starting calibration.
- To start calibration, press the calibration button once. The green calibration LED, by the calibration button go off, and the red calibration LED by the calibration button will come on, steady for approximately 15 seconds and then start flashing.
- 7. Now move the slide valve to the maximum load position. During this movement the cylinder capacity indication will go to 100%. When the slide valve is in the maximum (Mechanical) load position, push the calibration button once. The red calibration LED by the calibration button will stay on for approximately 15 seconds and then go off. The green calibration LED will come on, possibly flashing.
- 8. The calibration is now complete. Refit the calibration button cover.

**Note**; If during operation the Vi is adjusted (with the compressor stopped and the slide valve at minimum load position), the LPI will have to be re-calibrated as from point 4 above.( Only Howden WRVi and XRV Compressors)

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