

## PI-1 PNEUMATIC CONTROLLER

The EnPro PI-1 pneumatic controllers have been developed to provide a pulse output signal proportional to a pneumatic input signal i.e. 20 – 100 kPa. Typical uses are composite sample extraction for pipelines and ship loading and unloading. The unit is entirely pneumatic and therefore poses no hazardous area or electrical supply concerns.

A typical set-up would utilise a pneumatic flow sensor/meter coupled with a pneumatic square root extractor. The linearised output signal would then be converted to an adjustable single or double pulse output to drive a sampler motor.

### MODELS & FEATURES

The unit is portable, and available in three or six stage output settings.

PI-1/3 Three channels

PI-1/6 Six output channels

Typically the controller would be used in a harsh environment, so it is mounted in a rugged copolymer polypropylene case, with stainless steel pins for the hinges and handles.

To ensure clean air is used a separate filter regulator with an autodrain is included as a standard item.

### HOW IT WORKS

The unit will accept a standard analogue signal from a flow meter and convert it to a three or six stage proportional pneumatic outlet – depending on the controller used.

Before the unit is used it has to be calibrated to give the appropriate pulse output signal. This is determined by first nominating the maximum pulse output rate for the particular installation. This is a function of the quantity of product to be collected, the grab size and the period of the sample extraction.

### Timer Settings

The timers are set using the knob at the base of the sub panel. The time set will be the duration of the output pulse for stroking the sampler motor. When the timers (timers are paired a,b,c ....) have been set (instructions are given on the underside of the lid), the unit can be hooked up to the output signal from the flow device and an air supply source.

### Pulse rate

A table for maximum rate setting from 100 to 900 strokes per hour, in increments of 100 strokes per hour, are given in the inside of the lid.



PI-1/3 Controller

### SPECIFICATIONS

|                                   |  |
|-----------------------------------|--|
| Maximum air supply                | 1.7 MPa  |
| Output pressures                  | Up to 1.7 MPa  |
| Time delay adjustment per channel | 3 – 300 secs.  |
| Counter display                   | To 999,999   |
| Air supply filter                 | 40 micron  |
| Portable case                     | HDR  |
| Repeatability                     | >1%  |
| Weight                            | PI-1/3 8.5 kg<br>PI-1/6 10.0 kg                        |
| Dimensions                        | PI-1/3 485L x 392W x 192H<br>PI-1/6 560L x 445W x 265H |

### ABOUT US

Since 1990, Haldatec has been providing products and services to the Oil, Gas and related industries in Australia, Pakistan, Singapore, Papua New Guinea, India and New Zealand.

### ENPRO

Our house product label, EnPro, has been developed to complement our core business and has been driven by customer needs. Our comprehensive range includes innovative designs, adaptations and applications introduced to solve problems for our customers.

### STANDARDS

To ensure we provide the best possible support for our customers and suppliers, we have certification to ISO9001:2015.