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Hard copy product catalogues, and CDRoms have been published describing Kuhnke Pneumatics, Solenoids, Relays and Electronics; some divided into different books. A list of current publications is available on this web site or from our sales offices. Some may be available for download, but as substantially larger files.

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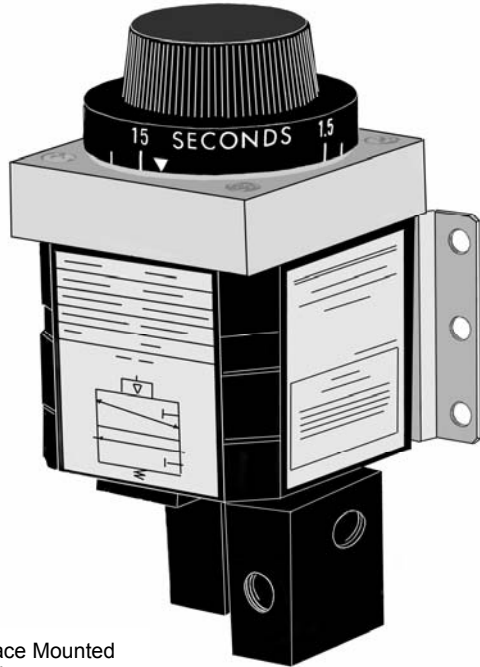
### Important Note

The information shown in these documents is for guidance only. No liability is accepted for any errors or omissions. The designer or user is solely responsible for the safe and proper application of the parts, assemblies or equipment described.

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### Panel or Rear Mounted Pneumatic Timer

(Up to 60 Minutes)



Surface Mounted  
PT Timer

The PT timer is an adjustable precise time delay pneumatic device. The timer is available with an on delay (NC), or an off delay (NO) output. The timer has 1/8 NPT ports.

The PT series timer combines a pneumatic timing mechanism with a floating spool valve assembly to provide a wide range of adjustable time control for fluid power systems. The timing assembly, which operates independently of the control pressure, is available in nine different ranges from one tenth of a second to 60 minutes, adjustable by means of a time-calibrated dial. Timing action is initiated by a motor diaphragm operated by a control pressure of from 0.5 to 10 bar.

The timer is equipped with a multi purpose 3/2 output valve allowing it to be used as normally open, normally closed or as a diverter.

The PT is designed for panel or surface mounting. Panel mounted versions include a 88mm square bezel while surface mounted units are equipped with a bracket for vertical mounting. If required, The PT can be specially calibrated for mounting horizontally.

## Technical Specifications

**Op. Pressure**

0.5 to 10 bar.l

**Connections:**

1/8" NPT ports

**Control Pressure:**

0.5 to 10 bar

**Media:**

Filtered air or non-aggressive gas, non-lubricated.

**Output Valve:**

Flow @ 6.5 bar – 250 liters  
Multi purpose 3/2 spool.

**Dial Indicator:**

Displays set time.

**Timing Start:**

On Delay - Application of pilot pressure to control port.  
Off Delay - Removal of pilot pressure to control port.

**Reset:**

On Delay - Removal of pilot pressure from control port.  
Off Delay - Application of pilot pressure to control port.

**Reset Time:**

60 ms @ 3.5 bar

**Repeatability:**

Up to 200 sec. - ± 5%.  
Over 200 sec. - ± 10%.

**Time Setting:**

Via dial.  
Accuracy ±10% of full scale.

**Operation:**

Timing cycle uses atmospheric pressure.

**Materials:**

Zamak housing, polycarbonate knob, aluminum valve with stainless spool. Diaphragms - Buna N

**Operating Ambient:**

-30°C to 70°C

**Dimensions (mm):**

Height – 134

Width – 63 -

Depth – 63

**Mounting:**

Surface or panel mounted.

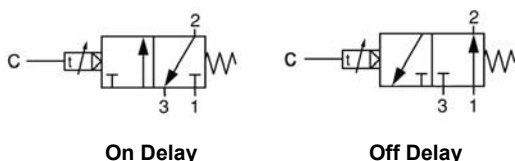
**Drilling Plan (panel mount):**

81 dia. hole.

### Selection Chart

| Timing Range      | Catalogue Number                |           |               |           |
|-------------------|---------------------------------|-----------|---------------|-----------|
|                   | Standard Vertical Surface Mount |           | Panel Mounted |           |
|                   | On Delay                        | Off Delay | On Delay      | Off Delay |
| 0.1 to 1 Second   | PT31A                           | PT41A     | PT35A         | PT45A     |
| 0.5 to 5 Seconds  | PT31B                           | PT41B     | PT35B         | PT45B     |
| 1.5 to 15 Seconds | PT31C                           | PT41C     | PT35C         | PT45C     |
| 5 to 50 Seconds   | PT31D                           | PT41D     | PT35D         | PT45D     |
| 20 to 200 Seconds | PT31E                           | PT41E     | PT35E         | PT45E     |
| 1 to 300 Seconds  | PT31K                           | PT41K     | PT35K         | PT45K     |
| 1 to 10 Minutes   | PT31F                           | PT41F     | PT35F         | PT45F     |
| 3 to 30 Minutes   | PT31H                           | PT41H     | PT35H         | PT45H     |
| 6 to 60 Minutes   | PT31I                           | PT41I     | PT35I         | PT45I     |

### Diagrams



### Port Identification

- Port C - Control input signal
- 1 - System air supply
- 2 - Valve output
- 3 - Exhaust

### On Delay Timer Operation

Pilot pressure is applied to the control port to start timing. After the timer reaches its set time, the valve switches over. *Removal of the pilot signal at any time resets the timer.*

### Off Delay Timer Operation

Applying pilot pressure of at least 100ms in duration to the control port shifts the valve. *When the pilot pressure is removed, the timing sequence begins.* After the timer reaches its set time, the valve switches off. Re-applying the pilot pressure resets the timer and valve.

### Options

Surface mounted units are calibrated for mounting in the vertical position. If horizontal mounting is required, add suffix "Y1" to the catalogue number. For a stainless steel fitting mounted on the pilot port add suffix "SS". To include a Dial Stop set at the factory (which prevents settings above or below a given number) add suffix "DS" and specify setting. For a Tamper Proof Cover add suffix "TP" to the catalogue number.

### Power Connections

For installations requiring larger output valves, use the standard timer and connect a pneumatically operated single air piloted 3/2or 5/2 valve of the size required to the timer output. Contact factory with size requirements.

### Typical Circuits

See typical timing circuit diagrams at the end of the timer catalogue section for help in constructing pneumatic timer circuits.