Air Timers and Impulse Relay Valves

Air Timers Delay Signal

Air timers are used to delay the air signal coming in or out of an air component. Depending on the model, the delay may be adjusted from 0.75 to 30 seconds. Input port is indicated by a yellow dot.

Timers are available in either normally closed (NC) or normally



open (NO) models. Normally closed models are used to time in and normally open models are used to time out. Once set, timers are accurate for repeatability to 10% with regulated air pressure.

General Specifications

Filtration: 40 micron filtration recommended

Lubrication: 30 wt. non-detergent oil

Pressure Range: 50-150 PSI (NC); 40-150 PSI (N0)

Mounting: (2) $^{11}/_{64}$ clearance holes

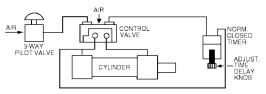
Life Expectancy: 1,000,000 cycles
Temp Range: 50°F to 120°F

Port Sizes/Material: %" / Acrylic

Model No	umber NO	Range	Ports	Length	Width	Height
KLC-105	KLH-105	0.75-6 sec.	1/8"	4"	1"	1 ¹ / ₂ "
KLC-110	KLH-110	1-11 sec.	1/8"	4"	1″	1 ¹ / ₂ "
KLC-212	KLH-212	15 sec2 min.	1/8"	4 ⁷ / ₈ "	1 ⁷ / ₈ "	1 ¹ / ₂ "
KLC-230	KLH-230	2-30 sec.	1/8"	4 ⁷ / ₈ "	1 ¹ / ₂ "	1 ⁷ / ₈ "
KLC-260	KLH-260	10-60 sec.	1/8"	4 ⁷ / ₈ "	1 ⁷ / ₈ "	1 ¹ / ₂ "

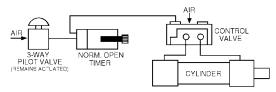
Note: NC timers have a green spool; NO timers have a red spool. For special timers, consult factory.

Timing In (Normally Closed) Circuit



In this circuit, the 3-way valve is actuated and air is sent to the control valve. The control valve shifts, sending air through port A to the cylinder, which extends. Air also flows to the timer where it begins to time to the pre-setting. Once reached, the timer opens, allowing the air to flow through to the control valves other pilot port, shifting the valve back. Air flows through port B, retracting the cylinder.

Timing Out (Normally Open) Circuit



When the 3-way valve is actuated, air flows through the NO timer to the control valve. The 3-way valve remains actuated. The control valve shifts, sending air through port A to the cylinder, which extends. At the same time, the timer begins to time to the pre-setting. Once reached, the timer closes, blocking off the air flow to the control valve, which spring returns. Air flows through port B, retracting the cylinder.