

MODEL COS1 - CLOCK OSCILLATOR, TURNS ANY RLC COUNTER INTO A PRECISION TIME INDICATOR/CONTROL



- DELIVERS CLOCK PULSES IN MINUTES OR SECONDS
- PROGRAMMABLE IN 4 DECADE STEPS PROVIDING TIME INCREMENTS OF 1, 0.1, 0.01 & 0.001
- TIMING PULSE ACCURACY OF 0.01% (CRYSTAL CONTROLLED)
- INHIBIT CONTROL INPUT FOR ACCURATE INTERRUPTION OF TIME CYCLES
- RESET CONTROL INPUT FOR ACCURATE TIMING STARTS SYNCHRONIZED WITH COUNTER RESET

DESCRIPTION

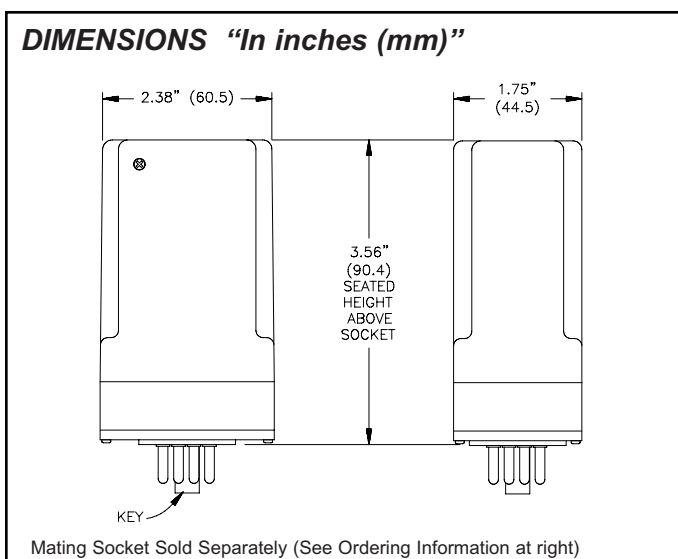
The Model COS1, Clock Oscillator provides a source of high accuracy clock pulses that can be applied to the input of any RLC Totalizing or Preset Counter to provide precision timing indication and control. Typical uses include exposure control, intervalometer requirements, actuation delay measurement, and many other applications.

The COS1 contains a crystal oscillator clock with a divider chain and a binary controlled selector that allows selection of output pulses in time intervals of 1, 0.1, 0.01 and 0.001 seconds. A divided by 60 (+60) divider supplies a separate output to provide the same selection in minutes. Time interval selection is accomplished by jumpers which pull "A" and "B" control inputs low as shown in the block diagram. Other control inputs include:

RESET: Pulling this input low sets and holds all dividers and registers at zero as long as RESET is held low. This input can be connected to the counter reset terminal to provide synchronized timing-start with the counter reset.

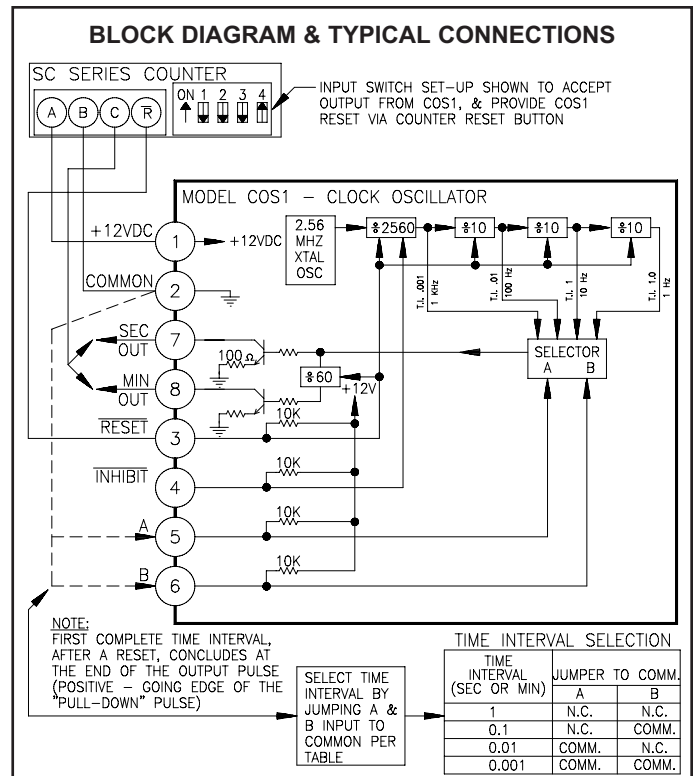
INHIBIT: Pulling this input low suspends the output of clock pulses without resetting accumulated time. This control input is useful when time must be totaled over separated time segments of machine operation. The INHIBIT input of the COS1 should be used instead of the Counter Inhibit Input when this function is needed.

The COS1 is packaged in a convenient Octal 8-pin Plug-in package that mates with UL and CSA rated base mounted or DIN rail mounted socket. The socket (order separately) features clamp-type screw terminals which accept stripped wires without lugs.



SPECIFICATIONS

- PRIMARY SUPPLY POWER:** 12 VDC $\pm 15\%$ @ 8 mA.
(Power supplied from counter being used, or from Accessory Power Supply in "stand-alone" applications.)
- OUTPUT:** Separate NPN Open Collector Transistor outputs for minutes and seconds. Output is a pull-down pulse with a time duration of 20% of the timing increment selected. $V_{OL} = 1 V @ 10 mA$ max.
- ACCURACY:** 0.01% Absolute timing accuracy.
- OPERATING TEMPERATURE RANGE:** 0° to 50°C
- WEIGHT:** 3.1 oz (87.9 g)



ORDERING INFORMATION

MODEL NO	DESCRIPTION	PART NUMBER
COS1	Plug-in Clock Oscillator	COS10000
-	Base Mount, 8-pin Octal Socket	SKT10000
-	DIN Rail Mount, 8-pin Octal Socket	SKTDIN00