

# **Features**

UL/CSA Listed, CE Certified

 Requires Only One Pulse Per Unit of Measure

- Doesn't Require Multi-Tooth Gears
- NEMA 4X / IP65 Front
- 5 Digit Ratemeter / 6 Digit Totalizer
- Low Cost
- RPM & Total

# Application:

The KAL-DR/T measures the time between pulses (1/ tau), It shows rate per minute (RPM)while keeping track of total units in an internal counter. An external connection causes a change from RPM to RPS (frequency)(No totalizer in RPS mode) No gears, no expensive inductive sensors - just a simple proximity switch sensing 1 pulse per revolution of the shaft - we do the rest!

# **Description:**

The KAL- DR/T monitors both rate and count continuously and simultaneously. While the display is indicating units per minute, a "background) totalizer keeps count of events or items. A pushbutton on the front panel toggles the display between rate and count and is also used to reset the count (by holding it pressed for 3 seconds) An alternative gated mode of operation is available to mea-sure signal frequency.

Maximum rate is 20000 in the RPM mode, or 50 kHz in the frequency mode. Connections are made via push on wire connectors for easy field installation. KAL- DR/T has a 6 digit, 0.276" high display and meets NEMA 4X standards from the front panel. It does not have a battery, so it must be powered from an external 10-30 VDC source.

# SPECIFICATIONS

Power: (Pin 5) 10 to 30 VDC, 10mA Display: 6 digit black LCD Digit size 0.276" high Temperature Range: + 14 to 140°F (-10 to 60°C)

# Dual Mode RPM/Counter or Frequency Meter



Sealing: Front panel sealed to NEMA 4X

**Connection**: 5 pin, plug in connector with 9" leads supplied with meter. **Accuracy**:

Period: 0.18%; 3 to 20K RPM. Gated: ±1 LSD 1 to 50K RPS

Signal Inputs:

Slow Speed Input (Pin 2): negative edge

triggered Low: < 0.7V, High: 5 to 18 V or open

Max. speed: 30 Hz, Min Pulse 15 mS

Input Impedance: 1 M Ohm High Speed

Input (Pin 4): negative edge triggered Low:

< 0.7V, High: 5 to 18 V or open

TTL and CMOS compatible

Input Impedance: 1 M Ohm

Update Time 2 sec. (min.) to 18 sec. (max.) depending on period.

### Period (RPM) Mode:

Max. speed: 333 Hz, Min. pulse 1.5 mS (3 to 20K RPM) Gated (Frequency) Mode:

Max. Speed: 50 kHz, Min. Pulse 10 uS (1 to 50K RPS) Period/Gated Mode Select (Pin 3):

Linked to Pin 1: Frequency Meter

Left Open:

Totalizer:

999999 maximum display (333 Hz maximum input speed) **Approvals:** UL File - E135458, CSA File - LR96702,

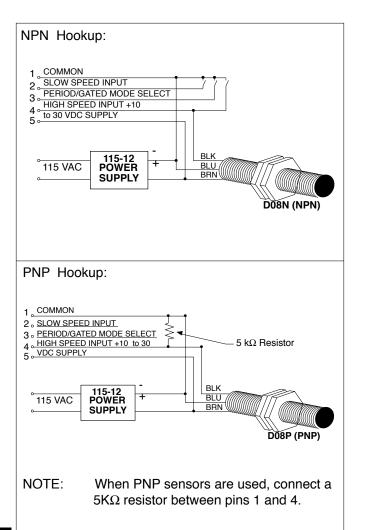
**RPM Meter** 

CE Approved Material: ABS

Weight: 1.7 oz.

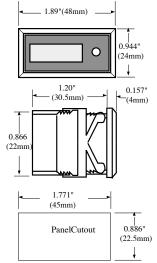


# **Typical Hookup:**

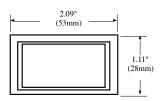


Our D Series Proximity Sensors interface easily with our full line of counters and ratemeters. Use PNP sensors (D\_P) on all KEP units except KAL Series, which requires D\_N (NPN) sensors. (See Sensors & Accessories Section)

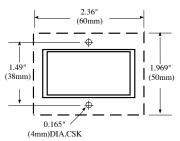
# Mounting:



#### Adaptors (included) KAL-DP1X2



### KAL-DP1



### HOW TO ORDER

Part Number	<u>Description</u>
KAL- DR/T	Ratemeter with Totalizer
KAL - DTB	Terminal block adaptor

#### Accessories

# RATE INDICATORS