PU-2E

PATENT # 4,376,915

PU–E Series Hall-Effect Pick-up

The PU-E Series pick-up is an economical and reliable way to **monitor motor speed.** Its patented design provides ease of installation in otherwise difficult to reach areas. The PU-E pick-up operates at a 5 to 24 volt level producing a sharp square wave output, which may be fed into Dart's field programmable tachometer, closed-loop control, counter, or any other digital device.

The PU-E pick-up series also includes a quadrature model to monitor both motor speed and direction by providing two square wave output signals 81° out-of-phase.

STANDARD FEATURES

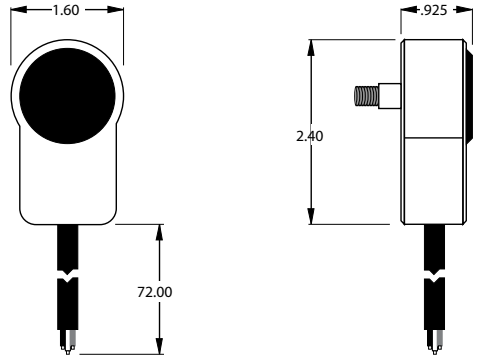
- PU-E Series pick-up mounts directly on shaft being monitored using single 10-32 screw.
- Maximum speed: 5,000 RPM or 50,000 pulses per minute.
- Supply voltage +4.5 VDC to +24 VDC.
- NPN open collector output signal with built-in pull-up resistor. Square wave output,signal voltage equals supply voltage. +5 VDC to 24 VDC supply voltage. Current sink: 50mA absolute maximum.
- Operating temperature: -10° C. to +45° C.
- Stainless steel ball bearing.
- Compact housing of molded "Santoprene" plastic rubber.
- Output cable-6' rubber jacketed, 3-wire 18AWG conductors;

  red wire: +VDC supply input
  black wire: Common
  white wire: Signal A
  brown wire: Signal B (model PU-20EQUAD only)

PU-E SERIES SELECTION GUIDE

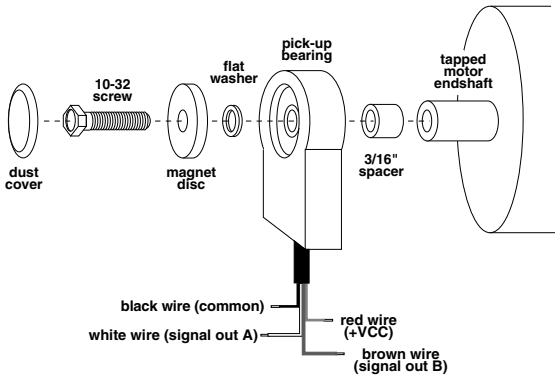
MODEL	PULSES PER REVOLUTION
PU-2E	1
PU-4E	2
PU-10E	5
PU-20E	10
PU-40E	20
PU-20EQUAD (quadrature pick-up)	10

DIMENSIONAL SPECIFICATIONS



No other mounting brackets or screws are necessary , as the cord will keep the unit from rotating. The PU-E gives a high signal when the south pole of the magnetic disc crosses the Hall-Ef fect transistor. The signal is switched low when the north pole crosses this same transistor.

INSTALLATION AND WIRING



CAUTION: DO NOT OVER TIGHTEN MOUNTING SCREW !!!

CAUTION: The PU-E cord should not be grouped with any other wires or cords. For applications with PU-E wires over 6 feet long, or particularly noisy environments, a **SHIELDED CABLE** is recommended. Connect the shield to the **COMMON** terminal of the control device, leaving the shield at the pick-up end floating.

PU-2E, PU-4E, PU-10E, PU-20E SCHEMATIC