



PU-R Series  
industrial/outdoor applications



PU-E Series  
industrial/indoor applications

## PU-E Series Hall-Effect Pick-up

The PU Series pick-up is an economical and reliable way to **monitor motor speed**. Its unique design provides ease of installation in otherwise difficult to reach areas. The PU 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 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.

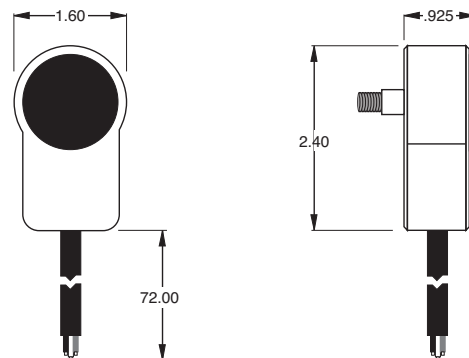
### STANDARD FEATURES

- PU Series pick-up mounts directly on shaft being monitored using a 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: -40° C. to +100° 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 SERIES SELECTION GUIDE

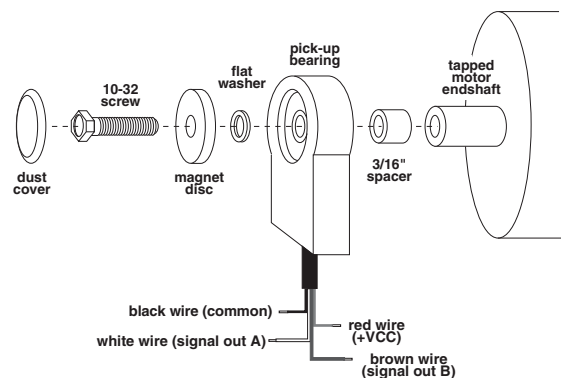
MODEL		PULSES/REVOLUTION
PU-2E industrial/indoor app.	PU-2R industrial/outdoor app.	1
PU-4E	PU-4R	2
PU-20E	PU-20R	10
PU-40E	PU-40R	20
PU-20EQUAD	PU-20RQUAD	10 (and direction)

### DIMENSIONAL SPECIFICATIONS



No other mounting brackets or screws are necessary, as the cord will keep the unit from rotating. The PU gives a high signal when the south pole of the magnetic disc crosses the Hall-Effect 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 cord should not be grouped with any other wires or cords. For applications with PU 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.