

Dart's Quadrature Hall-Effect Pick-up

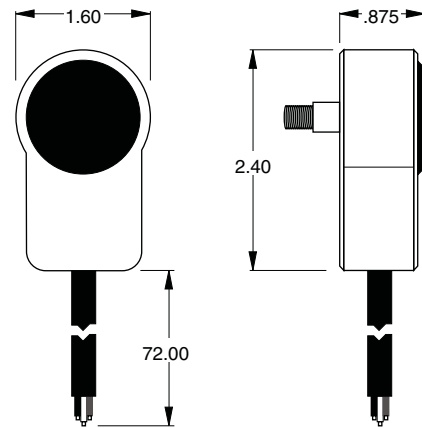
The Quadrature Series pick-up is an economical and reliable way to monitor motor speed. Its patented design provides ease of installation in otherwise difficult to reach areas. The Quadrature pick-up operates at a 5 to 24 volt level

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.

STANDARD FEATURES

- The Quadrature 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.
- Output of 10 pulses per revolution.
- NPN 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 Monsanto "Santiprene" plastic rubber.
- Output cable is a 6 foot rubber jacketed, 4-wire 18AWG conductors;
 - red wire: +VDC supply input
 - black wire: Common
 - white wire: Signal Output A
 - brown wire: Signal Output B

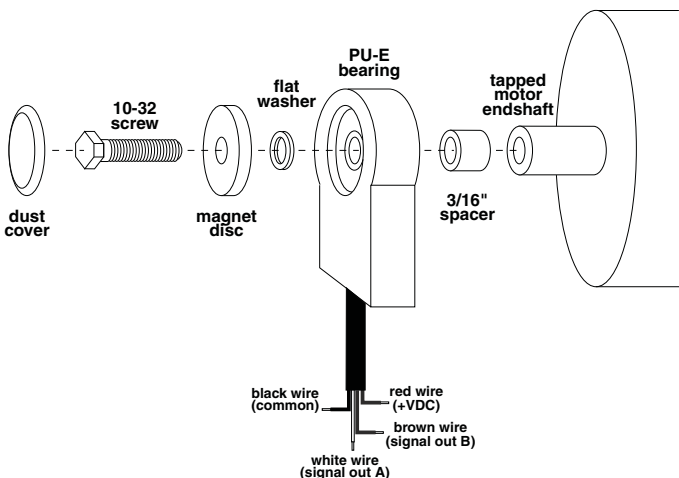
DIMENSIONAL SPECIFICATIONS



No other mounting brackets or screws are necessary, as the cord will keep the unit from rotating. The pick-up 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.

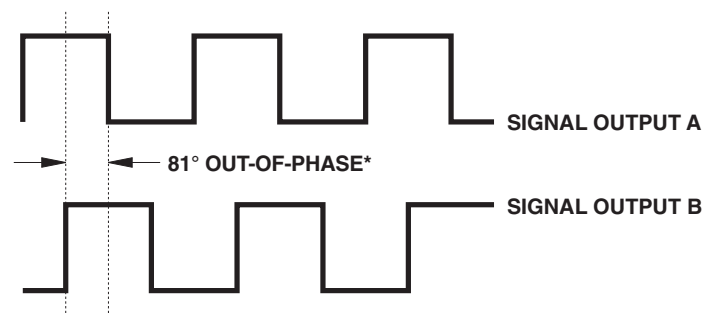
CAUTION: The pick-up cord should not be grouped with any other wires or cords. For applications with pick-up wires over 6 feet long, or particularly noisy environments, a SHIELDED CABLE is recommended. Connect the shield to the COMMON terminal on the wire end opposite the pick-up housing.

INSTALLATION AND WIRING



CAUTION: DO NOT OVER TIGHTEN MOUNTING SCREW!!!

QUADRATURE PICK-UP OUTPUT



*Typical out of phase output is 81° +/- 15°