

# ENCODER-FLEX 1024

## Encoder-Flex 1024

### Rotary Shaft Encoder and Gate Position Monitor

#### APPLICATION

The Encoder-Flex 1024 is a rotary shaft encoder that monitors slide gate position, shaft position, or shaft speed. Examples include position of rack and pinion gates, valves, distributors, and shaft speed on rotating shafts such as slow moving conveyors, mixers, and dryers.

#### METHOD OF OPERATION

The Encoder-Flex 1024 uses innovative technology to monitor gate position or shaft speed. The resolution is programmable from 1-1024 pulses per revolution and it consists of 4-20 mA output as well as quadrature pulsed output for directional speed, and a Modbus RTU communications for advanced configuration and diagnostics.

There are two status LEDs for easy identification of operational mode and target detection. The unit is quickly calibrated with the touch of a magnet for shaft speed, angular shaft position, or gate position. The sealed body is constructed from stainless steel.

Output signals can be wired to a PLC, SCADA system, or other controller for accurate display and control of shaft position and speed.



#### FEATURES

- ▶ Monitors shaft speed, angle, or position
- ▶ Outputs: 4-20 mA, Quadrature Pulse (Speed/Relative Rotation), and RS485 Modbus RTU
- ▶ Programmable resolution from 1 to 1024 Pulses per Revolution
- ▶ Compatible with gates with up to 500,000 rotations between closed and open positions
- ▶ Connects directly to control systems (PLC, SCADA, Watchdog, IE-Node, etc)
- ▶ Memorizes shaft position in the case of a power loss
- ▶ Simple magnetic calibration
- ▶ Comprehensive software for access to advanced programming and visualization
- ▶ Sealed stainless steel enclosure
- ▶ LED Status Indicators
- ▶ Class II Div 1 Approval (USA & Canada)

#### PART NUMBERS/ACCESSORIES

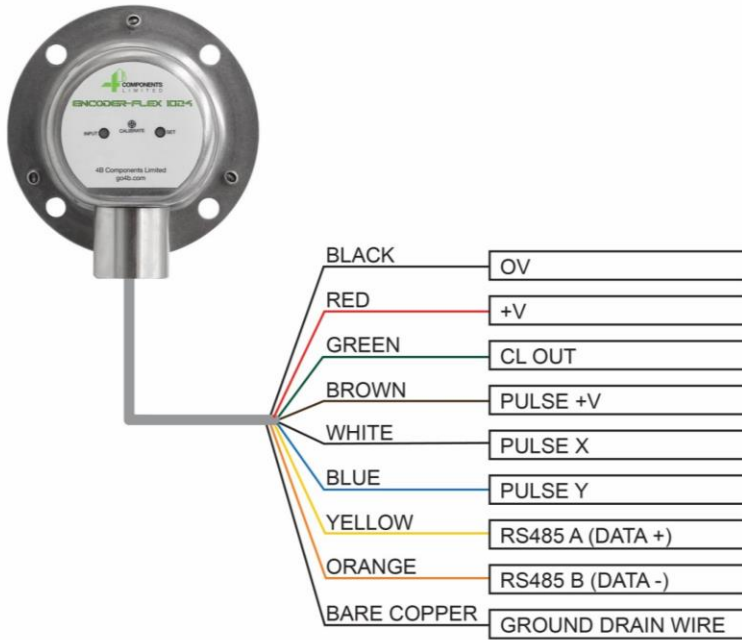
- ▶ EFLEX10242V34C/1 1/2-13 UNC thread
- ▶ EFLEX10242V34C/3 3/8-16 UNC thread
- ▶ EFLEX1024-1SC Shaft Coupling for 1" Shaft
- ▶ PTD110V6 Process Tech Display 100-240 VAC with 24VDC sensor power
- ▶ PTD100V4 Process Tech Display 24 VDC Display Only
- ▶ USB-RS485-1 USB To RS485 1' Long Converter



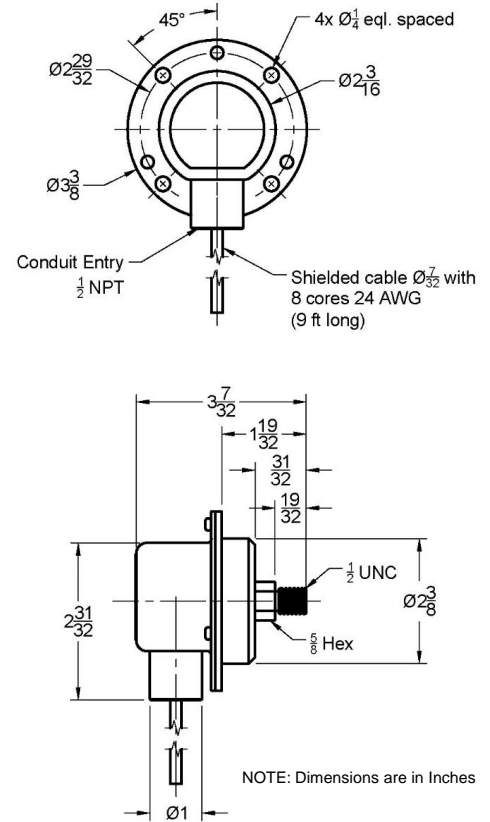
PTD110V6

# ENCODER-FLEX 1024

## WIRE DESCRIPTION



## DIMENSIONS



## TECHNICAL SPECIFICATIONS

Power Supply	12-24 VDC
Speed Range	0-2,000 RPM (Max Frequency 500 Hz)
Outputs	4-20mA
	Quadrature Pulsed (24VDC Max)
	Modbus RTU
Resolution	Adjustable 1 to 1024 Pulses Per Revolution
Enclosure	304 Stainless Steel
Thread Size	$\frac{1}{2}$ " UNC (Other Sizes Available)
Operating Temperature	-22°F (-30°C) to 122°F (50°C)
Cable	9 ft. (3m) – 8 Conductor
Approvals	Class II Div 1 Groups E, F & G (US & Canada)
Calibration	Magnetic or PC Software
Conduit Entry	$\frac{1}{2}$ " NPT