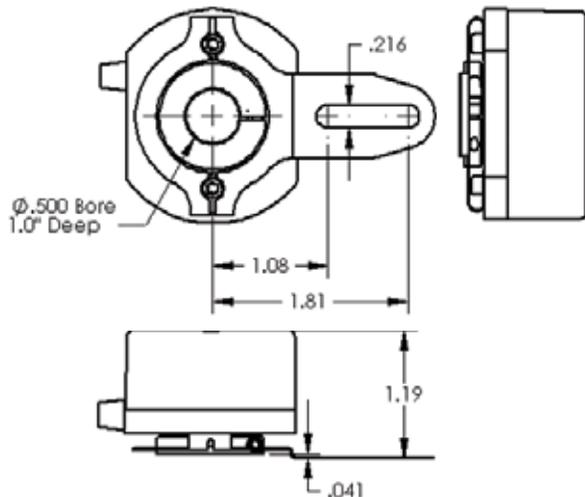


Incremental Encoders

Incremental encoders provide pulses or counts back to a PLC or VFD. A PLC can be programmed to use encoder pulses to synchronize, position, or vary the speed of an electric motor. They can be mounted on limit switches, reducers, or electric motors and can offer a variety of different pulses per revolution (PPR). Incremental encoders can provide as little as one pulse per revolution up to several thousand pulses per revolution.

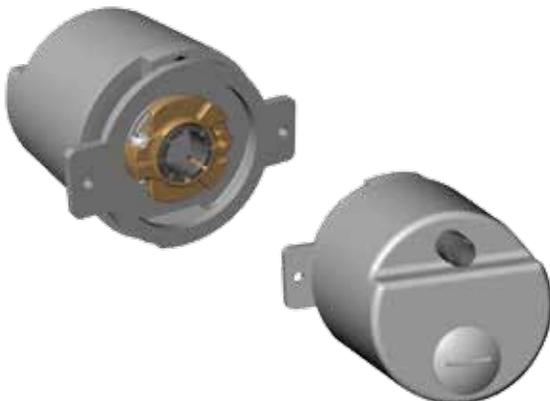


FEATURES

- Up to 10000 pulses per revolution (60 ppr standard)
- Input voltage 4.75 to +28VDC
- Operating temperature (-0° to +70°C)
- M12 cable connector or prewired cable options

Absolute Encoders

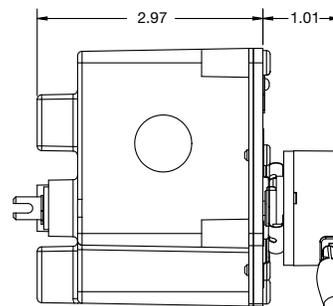
Absolute encoders work similarly to incremental encoders. Pulses or counts are monitored by a PLC or VFD. Ethernet/IP encoders communicate with a PLC over an Ethernet cable. Unlike incremental encoders, absolute encoders retain position through a power cycle. There is no need to reference or home absolute encoders after a power cycle.



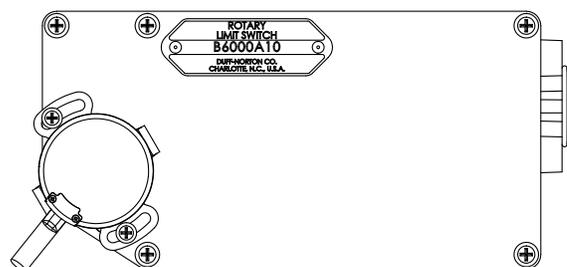
Ethernet/IP Absolute Encoder

Mounted Encoders

Try this new innovation from Duff-Norton! Customers can now choose to expand their controls capabilities with encoders mounted on our Duff-Norton B Series limit switches.



Mounted Encoder

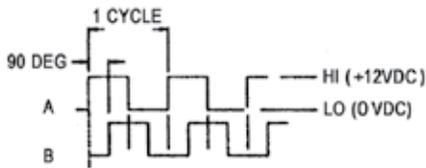


SCREW JACK ACTUATOR CONTROLS RING KIT ENCODER

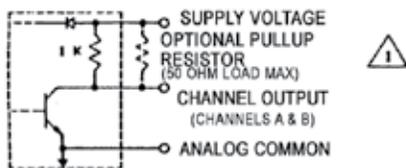
The Ring Kit Encoder counts motor revolutions and is mounted between the C-face motor and motor mounting flange. This mounting allows the actuator worm opposite the motor to be available for mounting a limit switch or driving another actuator. With 60 pulses per motor revolution, the ring kit offers a high pulse count relative to actuator travel. A small junction box with NPT opening is attached to the ring, allowing easy, protected electrical connections. Available for all sizes of NEMA C flanges used on Duff-Norton actuators. Additional output types available. Contact Duff-Norton Application Engineering for specifics.

SPECIFICATIONS

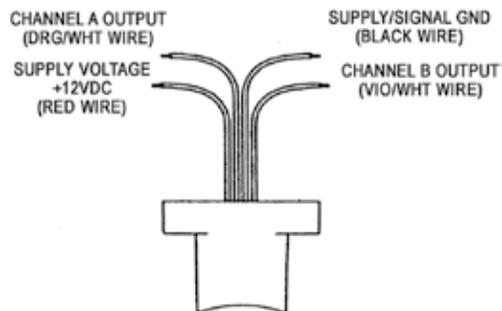
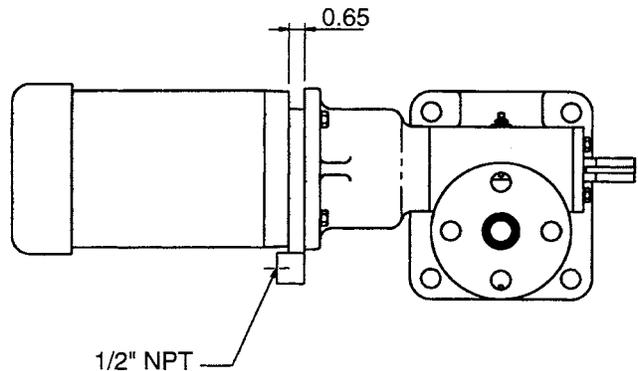
- Sensor Type.....Bidirectional shaft speed sensor
- Pulse Per Revolution 60 cycles each channel
- Supply Voltage.....5 - 24VDC
- Supply Current.....60 mA typical (115 mA maximum)
- Output Drive Capability ..250 mA per channel continuous
- Maximum Load.....50 ohms per channel



Output Channel Waveforms



Output Channel Schematic (Channels A & B)



Electrical Connections