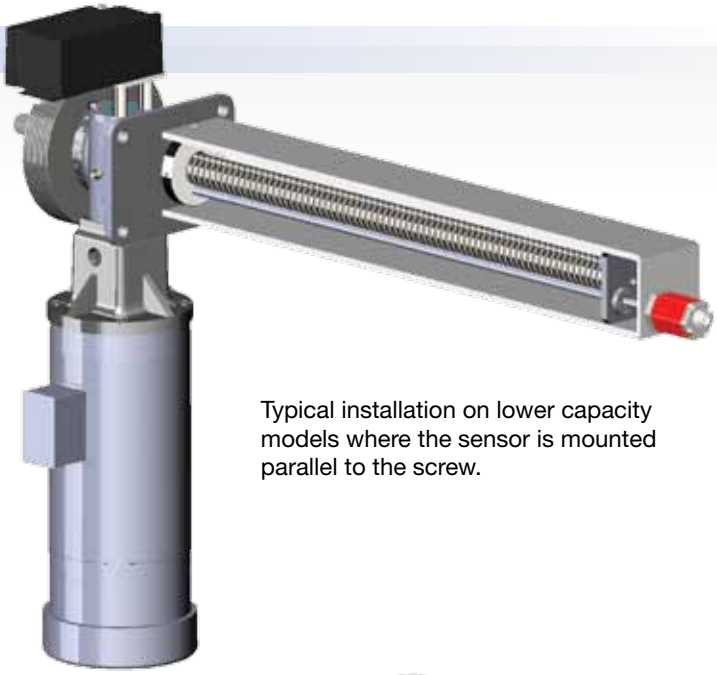
MAGNETOSTRICTIVE POSITION SENSOR

Duff-Norton offers Magnetostrictive Position Sensors for machine and ball screw actuators. These sensors offer analog or digital outputs, and can be used for accurate position indication or with a PLC in a closed loop control system. Magnetostrictive position sensors are non-contacting, resulting in longer life than other linear transducers or potentiometers.

Due to the fact that the magnet senses actual screw displacement, position indication is absolute and unaffected by gearset backlash.

FEATURES

- Absolute position indication
- Non-contacting, magnetostrictive technology
- Replaceable sensing element
- Fully enclosed in actuator coverpipe
- Lengths up to 60 inches (1525mm)
- Shock and vibration resistant
  - Analog or digital outputs
  - Voltage 0 to +10 vdc or +10 to 0 vdc
  - Current (4-20 mA or 0-20 mA grounded)
  - Start/stop
  - Pulse width modulated
- Open or closed loop control
- Available for a wide range of duff-norton machine and ball screw actuators



Typical installation on lower capacity models where the sensor is mounted parallel to the screw.

Typical installation on higher capacity models where the screw is “gun drilled” with the sensor mounted inside the screw.

SPECIFICATIONS

- Supply Voltage..... +15 to 26 VDC
- Non-Linearity ..... ± 0.02% of full scale on 0.002 inch whichever is greater (± 0.05 mm) whichever is greater
- Repeatability..... ± 0.001% of full scale, or ± 0.0001 in. (±0.002 mm) whichever is greater
- Hysteresis ..... 0.0008 in. (0.076 mm) maximum
- Measuring Range..... U.S. customary: 1 to 60 inch (0.1 inch increments)
  Metric: 50 to 1500 mm (5 mm increments)