

# Torque Switch Rotation Encoder (TSRE)



## Specifications

- Size: 9" x 3" x 2 1/2"
- Weight: 2 lbs.
- TEDS Sensor Recognition

## Sensor Part Number

P/N	System
160753	QL3-FS

## Accessory Part Numbers

P/N	System	Type
160756	QL3-FS	Junction Box ASM
160754		HBC Stem Position Encoder
160757		TSRE and HBC-SPE Kit Carrying Case



The TSRE Junction box comes equipped with an internal magnet to secure to the Limitorque housing.

The Torque Switch Rotation Encoder (TSRE) mounts to the torque switch on SMB/SB actuators, allowing measurement of spring pack displacement when access to the spring pack is not available. Teledyne's digital encoder TSRE comes with a Junction Box with different conversion factors depending on the size of the actuator, making it versatile with any SMB or SB actuator size 0 - 5. By using the integral TEDS plug and play technology, the conversion factors for each actuator size will be automatically programmed within the QL3-FS configuration test file.



TSRE Mounted on SMB-1.

# HBC Stem Position Encoder (HBC-SPE)



## Specifications

- **Size:** 13" x 7" x 5"
- **Weight:** 2 lbs.
- **Accuracy:**  $\pm 0.14^\circ$
- TEDS Sensor Recognition

## Sensor Part Number

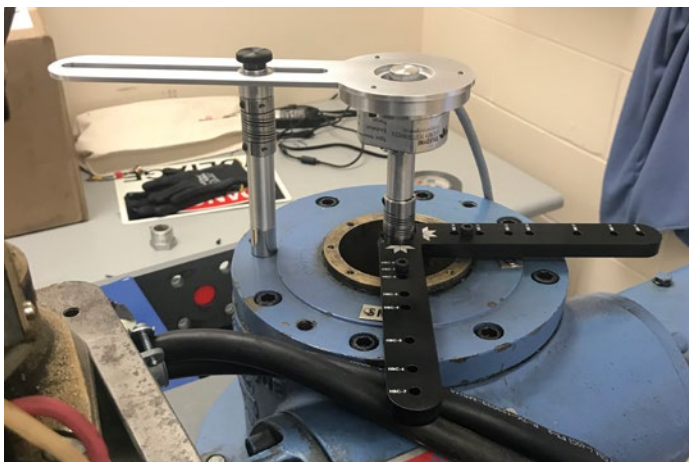
P/N	System
160754	QL3-FS

## Accessory Part Numbers

P/N	System	Type
160753	QL3-FS	Torque Switch Rotation Encoder (TSRE)
160757		TSRE and HBC-SPE Kit Carrying Case

Measuring valve stem position is a vital characteristic for rotary valve position. Traditionally, the stem position is measured with a string pot by wrapping the string around the valve stem. The HBC Stem Position Encoder (HBC-SPE) mounts to the top of the HBC drive sleeve, and provides a repeatable mechanical connection to measure position.

Teledyne's HBC Stem Position Encoder uses a bracket to attach to the top of a HBC drive sleeve, with clearly labeled attachment points to ensure the encoder sits in the center of rotation for accurate measurements.



*HBC Stem Rotation Device mounted on HBC1.*

