PTO Telemetry Transducer

- Fits Type 1, 2, and 3 splines
- Measures torque and speed of PTO shaft
- Integrated telemetry and encoder system
- Rugged construction
- Weatherproof
- Convenient anti-rotation eye-hook
- Pre-calibrated

Description

The Michigan Scientific *PTO Telemetry Transducer* is designed to measure the torque and speed of a power take-off (PTO) shaft with no modifications to the machine or implement. The PTO Telemetry Transducer's female spline mates directly to the machine's PTO shaft and the Transducer's male spline mates directly with the implement. Both splines contain locking mechanisms to keep the Transducer in place. The splined ends can be removed and changed to accommodate alternative PTO splines. The rugged weatherproof design allows for in field & long term testing.

The transducer has an integrated telemetry and encoder system. The strain gauge signals are transmitted through the telemetry while a hall effect sensor provides the speed signals. The telemetry transmitter provides excitation to the strain gauges, amplifies, digitizes, and transmits the torque signals via radio frequency. The encoder system is made up of an internal 30 pulse per rev Tone wheel and a Hall Effect sensor.

A non-rotating aluminum Stator is precisely aligned to the rotating Transducer and Tone Wheel by a large sealed bearing. The Stator contains the primary induction coil, receiving telemetry antenna, and Hall Effect sensor.

The PTO Telemetry Transducer can fit the agriculture standard spline types; Type 1, 2, and 3.

8500 Ance Road
Charlevoix, MI 49720
Tel: 231-547-5511
Fax: 231-547-7070
06-26-18
Rev. A

MICHIGAN SCIENTIFIC corporation

http://www.michsci.com
Email: mscinfo@michsci.com

321 East Huron Street
Milford, MI 48381
Tel: 248-685-3939
Fax: 248-685-5406

PTO Telemetry Transducer

Specifications

Full Scale Torque Ranges	±3750 lb.ft (5,000 N.m) or 1850 lb.ft (2500 N.m)
Non-linearity	+-0.5% FS
Hysteresis	+-0.5% FS
Speed signal	30 ppr Hall Effect
Sampling Rate	3 kHz
Data Bandwidth	1 kHZ
Temperature Range, Operating	
Transducer	-40°F to 221°F (-40°C to 105°C)
Receiver Box	50°F to 170°F (10°C to 77°C)
Power Requirements	
Induction Power And Receiver	11 to 15VDC, 3.0A max.
Spline options	Type 1: 1 3/8” (35mm) 6 tooth
	Type 2: 1 3/8” (35mm) 21 tooth
	Type 3: 1 ¾” (45mm) 20 tooth

8500 Ance Road
Charlevoix, MI 49720
Tel: 231-547-5511
Fax: 231-547-7070
06-26-18
Rev. A

MICHIGAN SCIENTIFIC corporation
http://www.michsci.com
Email: mscinfo@michsci.com

321 East Huron Street
Milford, MI 48381
Tel: 248-685-3939
Fax: 248-685-5406