

# FlowScanner™ Rotary Travel Transducer

FlowScanner Rotary Travel Transducers are used to accurately measure rotary valve travel, which is essential for diagnostic testing. Rotating the shaft of the transducer produces a digital output signal.

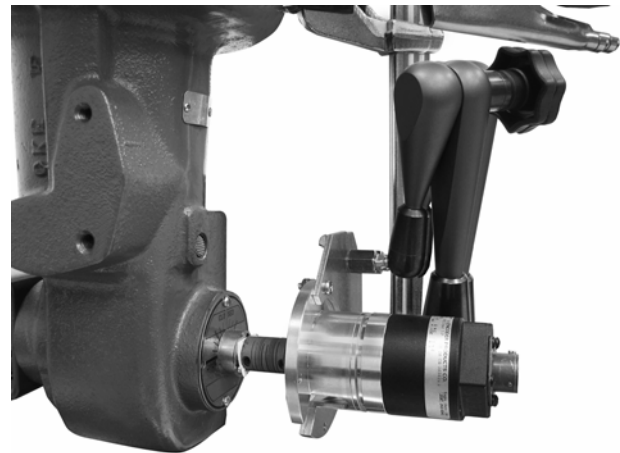
FlowScanner Rotary Travel Transducers are end shaft operated position sensors that are typically mounted temporarily to a control valve assembly for diagnostic testing. Valve diagnostic tools, such as the FlowScanner 6000 and QUIKLOOK 3-FS, have digital input channels to allow the Rotary Travel Transducer to be utilized. Valve travel is a vital characteristic to all control valves and significantly important to accurately measure during diagnostic testing.



## Features

- **High Resolution**—The 2 inch diameter encoder allows for a resolution of 0.0075 degree.
- **Compact, Rugged, Lightweight**—This industrial packaged transducer is designed to be used in a field environment. While being compact to fit into tight places and very lightweight to affix to any location.
- **Digital Quadrature Output**—The digital incremental quadrature output is a square waveform free of noise and drift. The output is viewed as pulses or counts, which are electronically counted to produce the accurate readings.
- **TEDS ‘Plug-and-Play’**—Embedded memory chips can be used to recognize and automatically set the transducer’s range, sensitivity, and calibration information. (Not used in FlowScanner 6000).
- **Compact design**—The rotary transducer allows for easier placement than prior art. Legacy encoders are large, bulky, and could not fit into tight spaces.

Figure 1. Mounted Rotary Transducer



## Product Bulletin

56.2:Rotary Transducer  
September 2017

FlowScanner Rotary Transducer  
D104181X012

Table 1. Specifications

### Available Configuration

Rotary Travel Transducer: P/N GE07458X022

### Electrical Specifications

Input: Supply Voltage 4.75 to 28 VDC

Output: Incremental Encoder

Connection: Industrial 10-pin Circular Connector

### Performance Specifications

Standard Sensitivity: 12,000 pulses per revolution

Resolution: 0.0075 degree  
(using standard 4x quadrature)

Calibrated Accuracy:  $\pm 0.0225$  degree per revolution  
(360 degrees)

### Environmental Specifications

Storage Temperature: -25 to 85°C (-13 to 185°F)

Operating Temperature: 0 to 70°C (32 to 158°F)

Operating Humidity: 0 - 98% RH without  
condensation

Sealing: IP50

### Mechanical Specifications

Construction: Powder Painted Aluminum

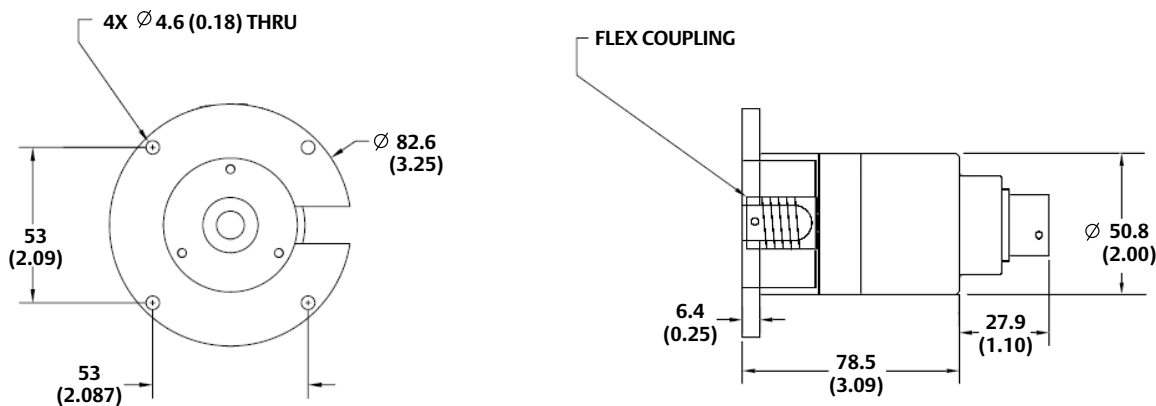
Weight: Less than 1 lb

Dimensions: see figure 2

Max Shaft Speed: 8,000 RPM

Starting Torque: 1.0 oz-in typical

Figure 2. Dimensions



mm (INCH)

Neither Emerson, Emerson Automation Solutions, nor any of their affiliated entities assumes responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use, and maintenance of any product remains solely with the purchaser and end user.

FlowScanner and Fisher are marks owned by one of the companies in the Emerson Automation Solutions business unit of Emerson Electric Co. Emerson Automation Solutions, Emerson, and the Emerson logo are trademarks and service marks of Emerson Electric Co. All other marks are the property of their respective owners.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs or specifications of such products at any time without notice.

Emerson Automation Solutions  
Marshalltown, Iowa 50158 USA  
Sorocaba, 18087 Brazil  
Cernay, 68700 France  
Dubai, United Arab Emirates  
Singapore 128461 Singapore

[www.Fisher.com](http://www.Fisher.com)

