

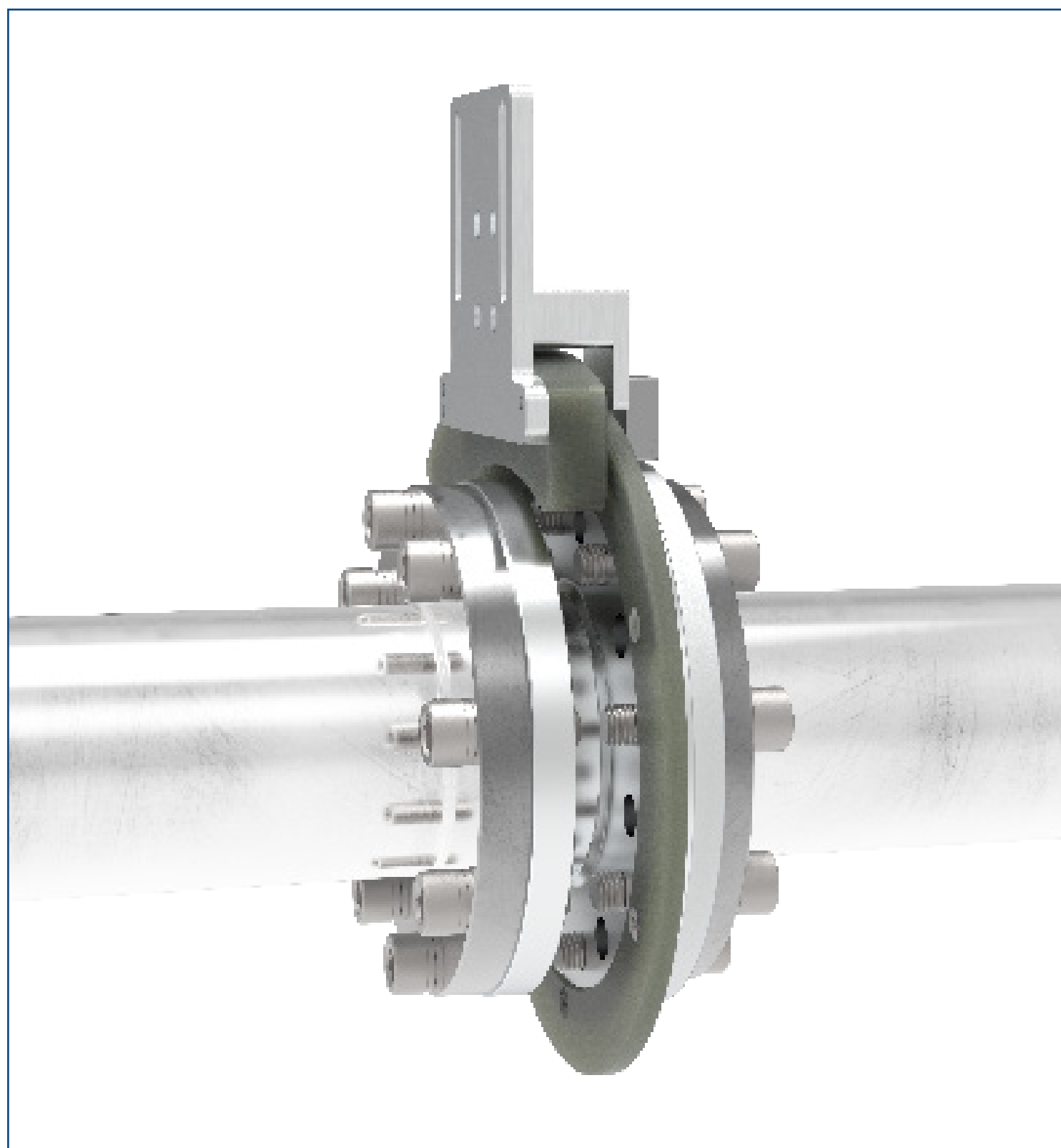
# Torque Flange Transducer

- 100 N · m to 50 kN · m Standard capacities
- Analog and digital output signals
- Robust signal transmission
- High precision torque, speed, and position outputs
- ISO 17025 accredited calibration (available with one-week turn-around time in the USA)



The Michigan Scientific Torque Flange Transducer is capable of measuring torque, speed, and position. Available in a wide range of capacities and sizes and built for durability, the transducer is configured for easy adaptation to a variety of applications.

The Torque Flange Transducer is compact and its bearingless design allows for a maintenance-free experience that will minimize downtime. The transducer's output data has very low noise and its easy-to-use electronics feature a convenient zeroing function. An optional speed and position encoder with customizable resolution can be integrated into the transducer at the customer's request.



## Wireless Telemetry Transmission

The Torque Flange Transducer utilizes a Michigan Scientific Wireless Telemetry System to ensure highly reliable signal transmission. The transducer is packaged with a telemetry stator, receiver, and system cables. The transmitter is powered via induction through the stator and torque data is transmitted from the transducer to the receiver via radio frequency (RF) signal.

## Product Applications

The Torque Flange Transducer can be utilized on rotating machinery like dynos, motors, engines, gearboxes, and axles during efficiency, fatigue, end-of-line, and hybrid drive testing.

Contact Michigan Scientific today to discuss your application.



Scan to learn more  
on our website!

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# Torque Flange Transducer

## TF\* Specifications

	TF0.1	TF1	TF2	TF3	TF5	TF10	TF15	TF25	TF50
Capacity	0.1 kN·m	1 kN·m	2 kN·m	3 kN·m	5 kN·m	10 kN·m	15 kN·m	25 kN·m	50 kN·m
Material	Aluminum	Aluminum	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Maximum R/min	9,000	7,000	7,000	6,000	6,000	6,000	6,000	6,000	6,000
OD	126.65 mm	162 mm	202 mm	202 mm	325 mm	325 mm	326 mm	326 mm	390 mm
Length	45 mm	49 mm	53 mm	53 mm	63 mm	75 mm	73 mm	73 mm	85 mm
PCD	84 mm	101.5 mm	130 mm	130 mm	155.5 mm	196 mm	288 mm, 206 mm	288 mm, 206 mm	350 mm, 250 mm
Mounting Fasteners	M8 x 6	M10 x 8	M12 x 8	M12x 8	M14 x 8	M16 x 8	M18 x 16	M18 x 16	M20 x 20
Encoder Resolution	16-bit								
Accuracy	0.10%								
Sampling Frequency	5.2 kSPS								
Output Type	Analog and Digital								
Position Output	Yes								
Operating Temperature Range	-40 °C to 85 °C								
Power Supply	9 VDC to 36 VDC								
Safe Overload	200%								
IP Rating	IP67								
Optional Additional Axis	Fy, Mx, and Mz								

The Michigan Scientific Torque Flange Transducer includes the Torque Flange Interface Box shown below, which supplies power to the system and provides the output signals for data acquisition.

