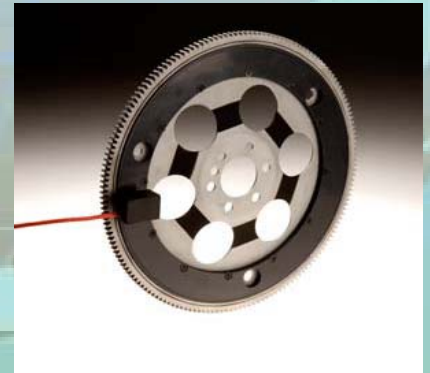


## FTP100-P Engine Torque Sensor Flex Plate

Teledyne Instruments has developed a Non-Contact Torque Sensor to address the challenging application of measuring automotive engine torque. This was accomplished by customizing and instrumenting the Flex Plate which connects the engine crankshaft to the torque converter. The resulting high quality, dynamic torque signal allows the automotive development engineer to understand the actual engine output before it is damped by the torque converter.

This data can be used to examine engine harmonics or filtered to obtain an average value for engine and transmission development purposes. The FPT100 system can be very helpful in the development and confirmation of ECM torque algorithms.

Two major automotive manufacturers have taken delivery of our FPT100 to support powertrain development efforts.



Technical Data	FPT100-P Torque Sensor Flexplate	Features	Applications
Torque Capacity	Dependent on engine output size, typically $\pm 750$ ft-lbs	All-Weather Operation No batteries or Slip Rings	Transmission Development
Calibration Range	0 to FS	User Selectable Scaling	Engine Development
Operating Temperature Range	-40 to +120°C	Remote Shunt Calibration	Torsional Analysis
Environmental Concerns	Completely Weatherproof	1000 & 100 Hz selectable filters	Racing
Maximum speed	7000 RPM (higher speeds available)	Analog output with 1Khz frequency response	
	<b>FPT100-P Stationary Electronics</b>	Non-Contact Data Transfer N.I.S.T. Traceable Calibration Turnkey Installation	
Combined Accuracy	0.5% FS		
Calibration	Remote shunt calibration		
System Frequency Response	1000 Hz (-3dB)		
Operating Temperature Range	15 to 70°C		
Output Signal	0 to $\pm 5$ VDC (scaleable)		
Power Supply	8-32 VDC, 1.6 A @ 12V		