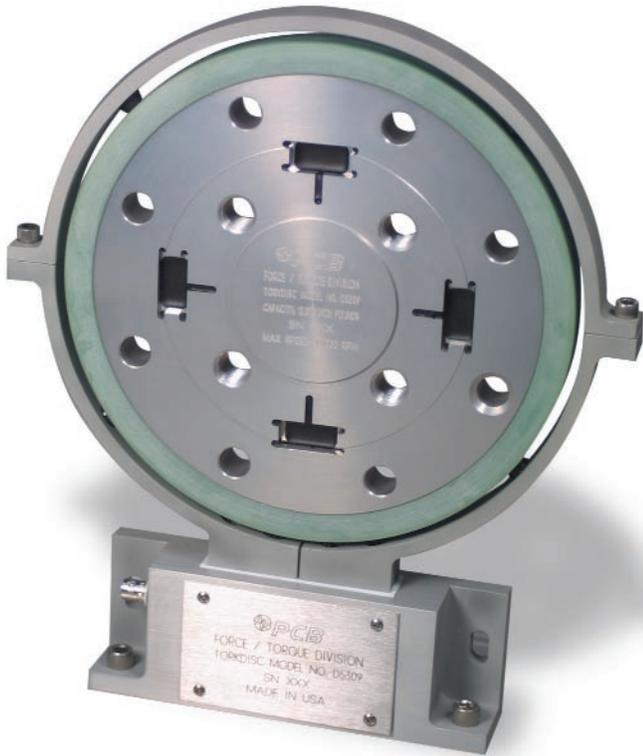


**TN-35**

# **Advantages of PCB TORKDISC® Over HBM T10F**

# Advantages of PCB Torkdisc® over HBM T10F



The Torkdisc® torque measurement system utilizes strain gage elements and digital, wireless telemetry to transmit data from rotating shafts. The Torkdisc® is very thin compared to other rotating torque measuring devices, permitting installation in areas where space is at a premium. With no bearings or other moving parts, the Torkdisc® offers exceptional longevity.

With our Total Customer Satisfaction philosophy, there is never a risk when purchasing from PCB. Commitment to engineering, production, testing, applications assistance, and customer service help reinforce this position.

- The Torkdisc® is available in custom configurations for unique applications.
- The electronics bandwidth of the Series 5300A Torkdisc® is 2,000 Hz, the HBM T10F has an electronics bandwidth of 1,000 Hz. The 2,000 Hz bandwidth of the Torkdisc® provides enhanced capability in combustion engine testing in vehicle or dynamometer.
- The Torkdisc® provides two simultaneous analog outputs of 0 to  $\pm 5$  volts and  $12 \pm 4$  mA as standard, which are independently scalable. The HBM unit provides a 10 kHz frequency output as standard and offers an analog output as a \$790.00 option. Depending on the customers requirements, this can be an advantage. Most U.S. customers prefer the voltage output.
- The Torkdisc® has a standard operating temperature range of  $-29^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ . The HBM unit has a standard operating temperature range of  $-10^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$ .
- The Torkdisc® permits axial float (rotor to stator) of 6 mm, the HBM unit limits axial float to 3 mm.
- The HBM T10F is more sensitive to temperature variations than the Torkdisc®. The HBM T10F temperature effect specification is  $\pm 0.015\%FS/^{\circ}\text{C}$  on zero and  $\pm 0.020\%FS/^{\circ}\text{C}$  on span compared to  $\pm 0.0054\%FS/^{\circ}\text{C}$  on zero and  $\pm 0.0054\%FS/^{\circ}\text{C}$  on span for the Torkdisc®.
- The Torkdisc® is a compact one piece design whereas the HBM T10F is supplied with a bolted-on flange adapter, which increases the length to the HBM unit to nearly twice that of the Torkdisc®.

- Total Customer Satisfaction - PCB Piezotronics guarantees Total Customer Satisfaction. If, at any time, for any reason, you are not completely satisfied with any PCB product, PCB will repair, replace, or exchange it at no charge. You may also choose to have your purchase price refunded.
- 24-Hour SensorLine<sup>SM</sup> - PCB offers to all customers, at no charge, 24-hour emergency phone support. This service makes product or application support available to our customers, day or night, seven days per week. To reach a PCB SensorLine<sup>SM</sup> customer service representative, call 716-684-0001.
- ISO 9001 Certification - PCB Piezotronics is registered by the Underwriters Laboratory, Inc. as an ISO 9001 facility and maintains a quality assurance system dedicated to resolving any concern to ensure Total Customer Satisfaction. PCB also conforms to the former MIL-STD-45662A and MIL-Q-9858.
- A2LA Accreditation - Our on-site calibration laboratory is accredited by The American Association for Laboratory Accreditation and meets or exceeds the requirements of ISO/IEC 17025-1999 and ANSI/NCCL Z540-1-1994. Our certificate number is 1862.01.
- Manufactured, calibrated, certified, and serviced in Buffalo, New York U.S.A.
- Field support via nationwide network of factory trained application engineers. Call (888) 684-0004 for the location nearest you.
- Call (888) 684-0004 Toll Free, for factory applications support.



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