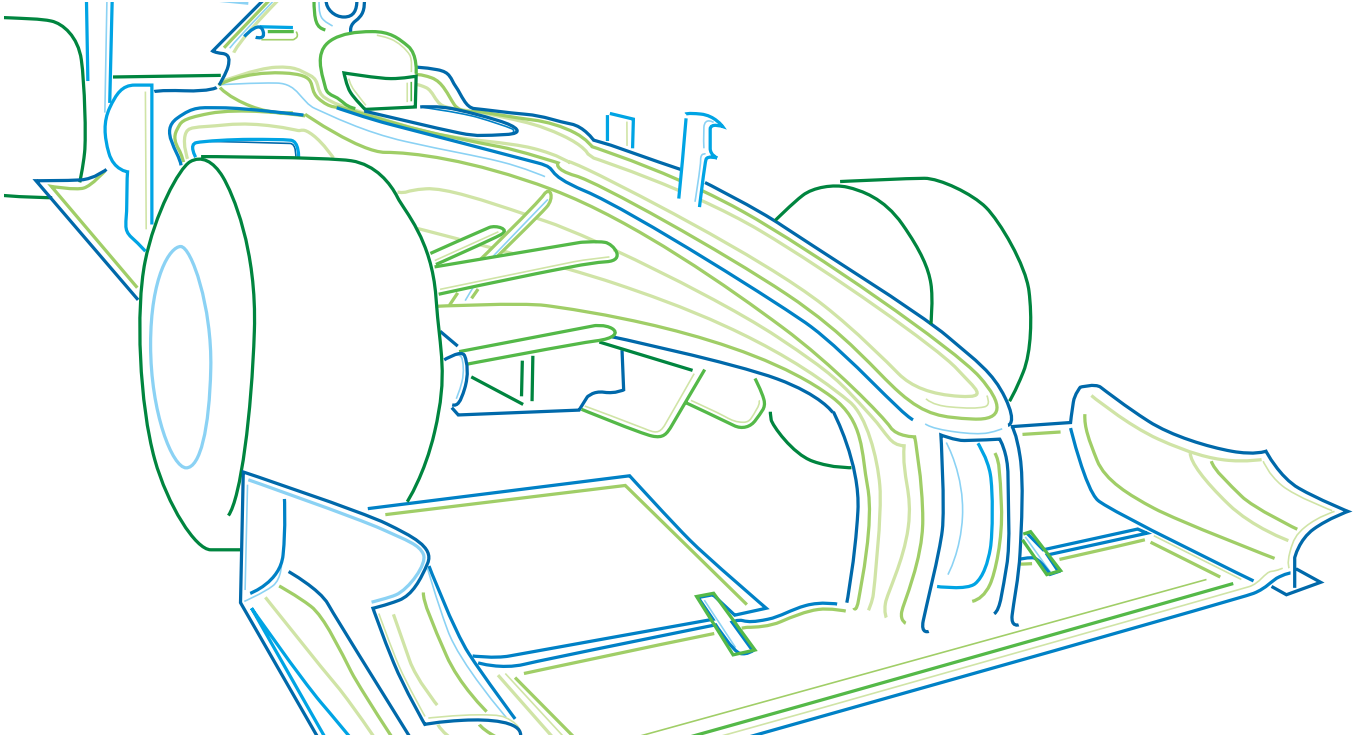


Torductor[®]-S

Get the competitive edge using Direct Torque Measurement

When competitiveness is balanced on a knife-edge you need the leading edge in torque measurement. The Torductor[®]-S torque sensor is ideally suited for applications in motorsport where reliability is of paramount importance. It is successfully used in Formula One, Touring Cars, Sportcars, etc..



Talking the torque

Motorsport is highly competitive and in order to stay ahead of the competition new technology is rapidly being developed. With our assistance you will achieve a competitive advantage using up-to-date torque measuring technology developed by ABB.

Unique features of the Torductor[®]-S are its compact overall dimensions and ability to operate at high temperatures in hostile environments. The ABB Torductor[®]-S is designed for temperature peaks up to +250°C and the typical environment found within the powertrain in terms of vibrations and lubricants is no problem for the sensor.

”...reliability is of paramount importance...”

Applications

Engine

- As an on-board dynamometer it gives the true in-car engine performance
- Enable mapping and tuning of the engine on the track
- Reveal information about transients not seen on an engine test rig

Transmission

- Precise monitoring of gearbox condition including wear of the gearbox
- Measure and optimize the efficiency of the transmission
- Synchronization of gear actuation and engine cut during gearshift
- Minimise risk of damage to the gear dogs
- Faster and more reliable gearshift
- Optimize seamless gearshift

Active Differential

- Improve traction and prevent wheel spin
- Accurate indication prior to slip

Power Steering

- Non-compliant steering torque measurement
- Distinct and quick steering control

KERS

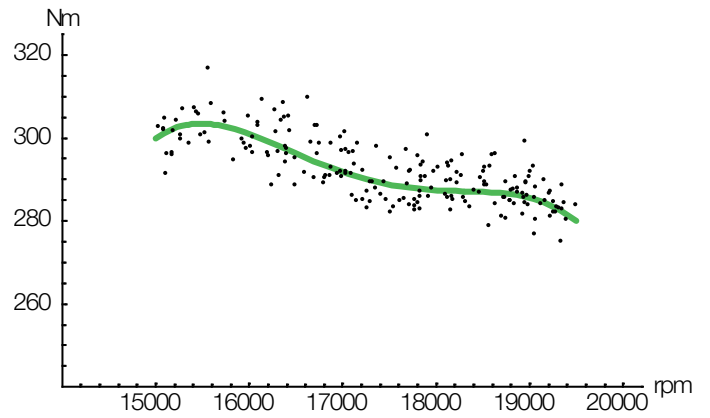
- Can be used in KERS (Kinetic Energy Recovery Systems) to accurately measure energy take-up and release

Properties	
Nominal torque	10 to 5000 Nm
Measuring error	<2 %
Repeatability error	<0.1 %
Speed range	0 - 20000 rpm
Bandwidth	>1 kHz
Sensor diameters	10 - 70 mm
Working temperature range	-40 to +200°C (peak 250°C)

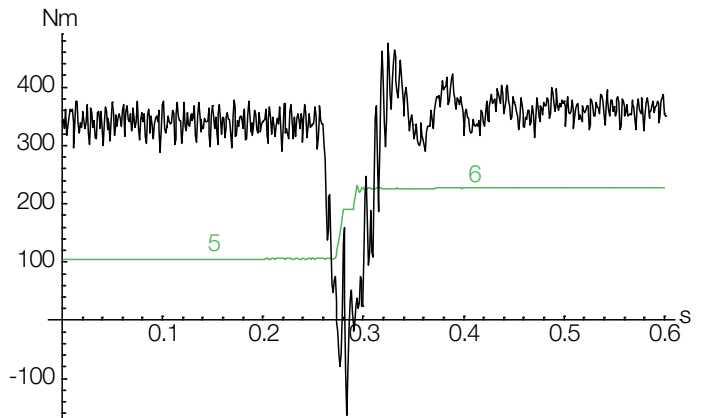
Contact us

ABB AB

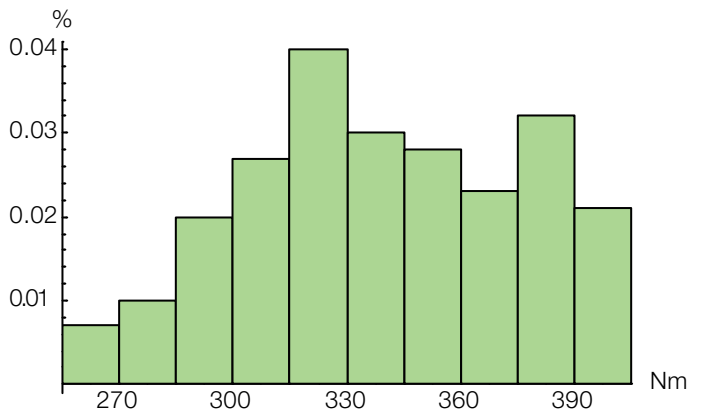
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Engine map of a racecar during race



Gearshift 5 - 6, F1



Part damage fatigue at different torque levels