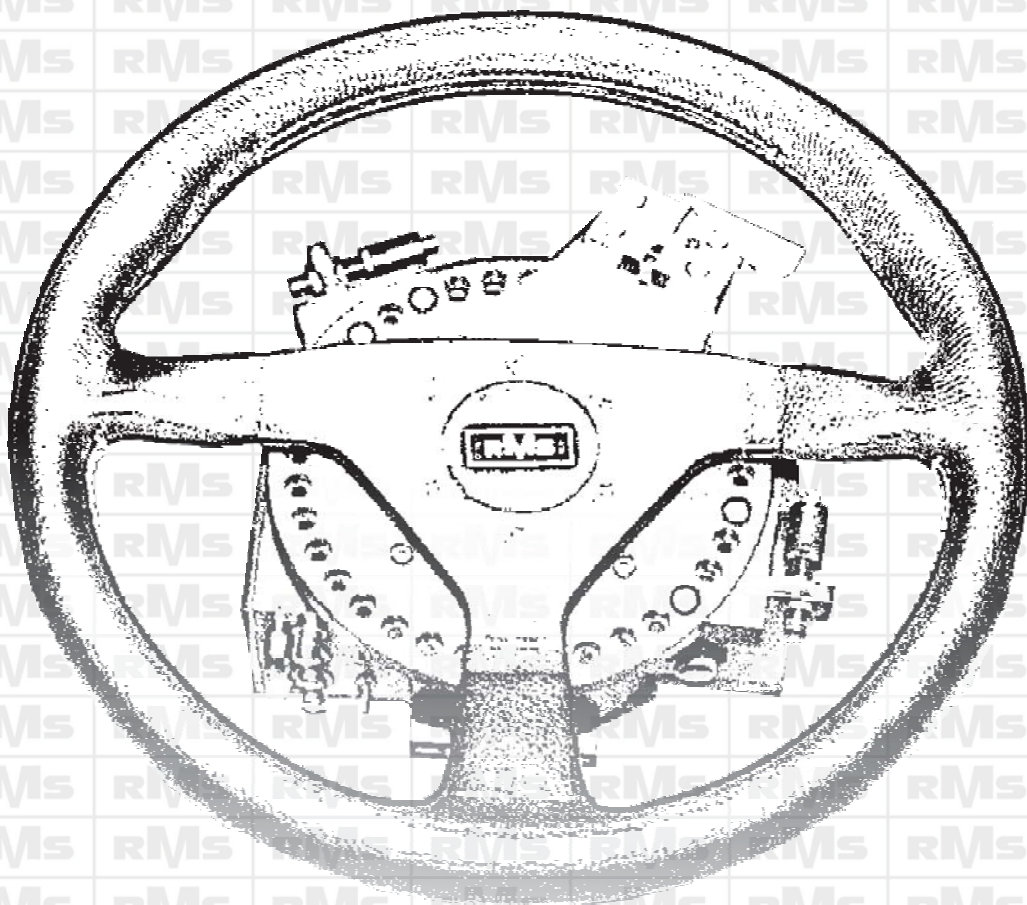


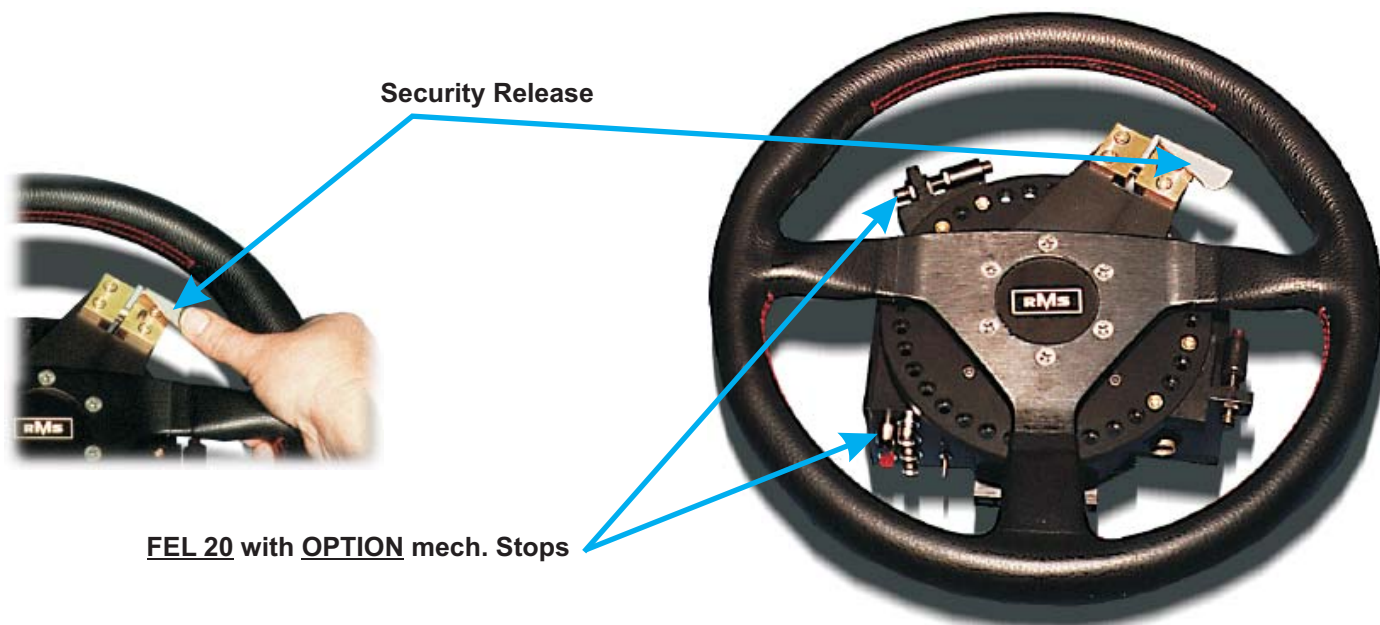
RMS

Dynamic Test Systems



Steering Wheel FEL 20

FEL20-V1-A3-E-38/03/05



Steering Wheel FEL 20

The RMS Steering Wheel FEL 20 is used in dynamic tests (i.E. ISO 3888, ISO 4138, ISO 7975,...) for the measurement of:

- **Steering Torque**
- **Steering Angle**
- **Steering Angle Velocity**

The device is powered by car battery and can be used on either cars or trucks. The ease of use and compact design reduce installation and handling problems. High accuracy is based on a direct driven encoder and from cross torque interferences isolated strain gauges that produce exact and reliable data in regard to a short set up time. The analog output can be transmitted via BNC connectors to an optional data acquisition system.

Customer Gains:

- Easy Installation due to compact design and free adaptation of any steering wheel ring
- Overload protection (approx. 1000 Nm), constant steerability guaranteed
- Easy handling by two push buttons and switch for reset and measuring range
- Quick installation via adapter, without external signal conditioning.

Technical Specification FEL 20/1:

Steering Torque::

Range:	$\pm 10 / 100$ Nm (switchable)
Output:	± 5 V DC FS
Accuracy:	$\pm 0,2\%$ (optional $\pm 0,1\%$)
Offset Calibration:	by push-button, at straight forward position of steering wheel
Filter:	Butterworth, 3 dB / 30Hz (Raw data output optional)
Overload Capacity:	approx. 1000 Nm, steerability always guaranteed

Steering Angle:

Range:	$100^\circ / 1000^\circ$ (switchable)
Output:	± 5 V DC
Accuracy:	$\pm 0,1\%$ FS
Offset Calibration:	by push-button
Filter:	Butterworth, 3 dB / 30Hz

Steering Angle Velocity:

Range:	$1000^\circ/s$
Output:	± 5 V DC
Accuracy:	$\pm 0,2\%$
Resolution:	$<1^\circ/s$
Filter:	Butterworth, 3 dB / 30Hz

Option: Mechanical Stops

- Adjustable steerability limits for max angle $\pm 135^\circ$.
Shutoff of steering wheel via an ergonomically positioned push button for emergency situations.
- Other Ranges optionally available.