

AVL Driveability



Drive Standard for Passenger Cars

AVL DRIVE is a method developed by AVL in order to evaluate the subjectively perceived behaviour of a car, i.e. the driveability and to give an objective rating—the driveability. That rating is based on the evaluation of many criteria derived from the experience of several hundred test drivers.

AVL DRIVE Standard has been tailored for different passenger car classes by using a well defined set of sensors and represents a fast method for rating the driveability which delivers reproducible results on individual test tracks.

Areas of Usage

DRIVE Standard is a common tool for quick comparison and performance tests of passenger cars with manual transmission.

AVL DRIVE Standard is an easy way to rate the driveability of a passenger car and to perform an unambiguous ranking expressed by the AVL DRIVE Index. This DRIVE Index allows a convenient comparison against the best-of-the-class.

AVL DRIVE Standard needs no specific test track for performing the driveability tests but can be used on any routes typical for a specific car class or application.

Your Benefits at a Glance

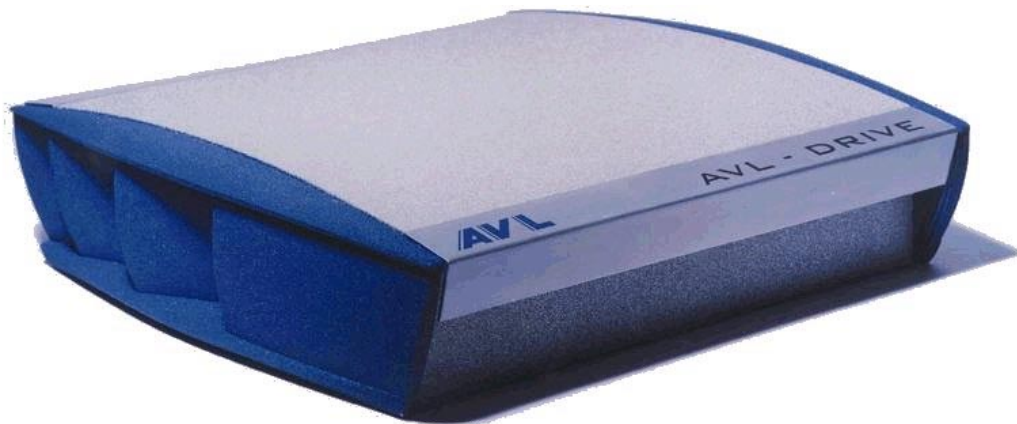
- Powerful benchmark tool
- Objective rating of subjective driving impressions
- No specific test track necessary
- Criteria and rating derived from extensive test driver experience
- Automatic detection of operating modes
- Driveability evaluation in real-time with immediate display
- Exact repeatability
- Quick installation and easy handling

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Technical Features

The DRIVE Standard represents an expert system that is capable to detect during test driving different main operating modes derived from measured signals. Such main modes are engine start, idle, tip-in, tip-out, gear shift, acceleration, etc. From these main operating modes and subsequently derived sub operating modes with a large number of driveability criteria the DRIVE Index is finally composed.

The DRIVE Unit works in real-time permitting the driver to see immediately the DRIVE Index. The DRIVE Unit includes signal conditioning, data acquisition and data evaluation in a single cabinet (usually mounted in the luggage boot) with connectors for all required sensors e.g. for acceleration, electrical load, clutch/accelerator pedal position, cabin noise, etc. An optimised DRIVE Sensor Set (option) for measuring these quantities is available from AVL. In the DRIVE Sensor Set included is an LC-display for dash board mounting allowing the driver to have a quick look on major parameters such as the DRIVE Index or identified operating modes.



The DRIVE Analysis Software presents the evaluated driveability as a unique value, the AVL DRIVE Index. This index is a rating of how a passenger car responds to driver actions and how this is perceived by the driver. DRIVE allows easy judgement of the actual driveability and the assessment of changes on the car and calculates a ranking in a standard defined by AVL.

The DRIVE Analysis Software breaks a test run down into operating modes and driving criteria and displays the single ratings in tabular form. The tabular listing of operating modes and driving criteria allows a detailed analysis of each part of a test run and how it contributes to the overall driveability value, i.e. the DRIVE Index.

With the Drive Standard it is possible to compare different cars of the same class or to easily identify areas of problematic vehicle or engine behaviour.

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Options

The DRIVE Analysis Software is available for different passenger car classes, all with manual transmission:

- sub-compact car class
- compact car class
- medium car class
- large car class
- luxury car class

Additional options are:

- DRIVE Sensor Set
- Speed Sensor (if the speed bit is not available)
- DRIVE Cable Set
- Notebook PC for AVL Drive
- DRIVE System Calibration
- DRIVE Commissioning
- DRIVE System Support