

AVL INDIMICRO™ ACCESSORIES



AVL VEHICLE INTERFACE (TI0602VIA.01)



The AVL VEHICLE INTERFACE is used in combination with AVL IndiMicro™ for on-board applications. The device features four independent functions:

Ethernet Switch:

The installed 5-point industrial Ethernet Switch for Ethernet & Fast Ethernet (10/100Mbit/s) can be used for the connection of cascaded AVL IndiMicro™ Devices, the Application System, such as INCA and the PC.

Voltage Stabilizer:

The Voltage Stabilizer transforms an input voltage of 4,5VDC up to 18VDC into a constant output voltage of 12VDC. This stabilization of the power supply is necessary for the analysis of engine start manoeuvres as the battery voltage can drop for a short period of time below 9,5VDC, the minimum supply voltage required for AVL indicating devices.

Conditioning of crank angle reference signal sensors:

Analog signals from Hall- or Inductive crank angle sensors can be connected directly to the AVL VEHICLE INTERFACE. The digitalized output signal can be connected to the crank angle input of the AVL IndiMicro

Conversion of analog ignition and injection signals:

The AVL VEHICLE INTERFACE converts analog signals from active current clamps into digital signals. It is used to measure the ignition or injection pulses via the digital inputs of the AVL IndiMicro

Benefits at a glance:

- Embedded Ethernet Switch for easy connection to the measurement computer
- Engine-start measurement without use of a separate testing battery
- Hall or inductive crank angle reference signal sensor
- Conversion of analog current clamp signals
- Intelligent mounting system in combination with AVL IndiMicro™



ACTIVE CURRENT CLAMP (TI0602ACCA.01)

PRODUCT AVAILABLE VIA
AVL ePRODUCTS
<https://shop.avl.com>



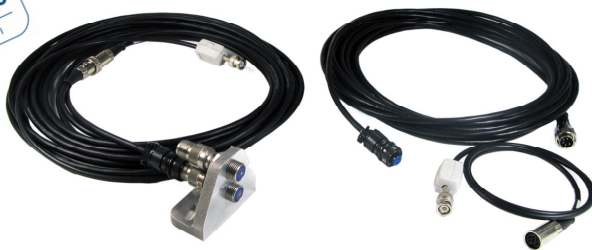
The Active Current Clamp measures AC- and DC- currents by the Hall-Effect principle in the range of 50 mA up to 100A. In combination with an AVL indicating system it is used to detect ignition and injection signals as well other control signal of an internal combustion engine.

Benefits at a glance:

- Long, strait shape for easy application on single cables or wiring looms
- Low phase shift for exact results
- Measurement of DC and AC signals for true RMS measurements
- Direct connection to AVL indicating system or AVL Universal Pulse Conditioner 389 via BNC connector

AVL INDUCTIVE SIGNAL SENSOR SET (TI0333SETA.01)

PRODUCT AVAILABLE VIA
AVL ePRODUCTS
<https://shop.avl.com>



The Inductive Signal Sensor Set can be used for general speed sensing applications, where the overall size of the sensor is not critical. It is best for medium to high speeds and electrically noisy environments.

The Inductive Signal Sensor Set is also used for the acquisition of crank angle reference and trigger signals or ECU-signals in combination with the AVL Universal Pulse Conditioner 389.

The set consists of 2 inductive sensors, an aluminium pick-up clamp for 2 inductive sensors and 2 BNC-cables.

Benefits at a glance:

- Cheap crank angle reference signal sensor for applications, where no optical crank angle encoder can be used and also no on-board sensor is existing



AVL VEHICLE INTERFACE	ACTIVE CURRENT CLAMP	AVL INDUCTIVE SIGNAL SENSOR SET
Ambient temperature: -40°C up to + 60 °C	Input Hall sensor <ul style="list-style-type: none"> ▪ Connection BNC socket and 5-pin C91 socket ▪ Max. input voltage ± 10 V / input protection up to 50 V ▪ Input resistance 1.2 MΩ 	mesh width: 12.5 mm Output voltage: 40V P-P min.
Dimensions (WxHxD) 218 x 42 x 230mm without connected cable	Input active current clamp <ul style="list-style-type: none"> ▪ Connection BNC socket ▪ Max. input voltage ± 10 V / input protection up to 50 V ▪ Input resistance 1.2 MΩ 	measurement range A/DC: 0.05 - 100 A Coil resistance: 45 to 85 OHMS
Weight: 1,5 kg	Input inductive sensor <ul style="list-style-type: none"> ▪ Connection 5-pin C91 socket ▪ Overload capacity Input protection against electrostatic voltages or charges occurring during operation or manipulation ▪ Maximum engine speed: The upper speed limit is determined by the maximum input mark frequency of 50 kHz. For example: Number of input marks = 108 teeth, Max. speed = 27.778 min⁻¹ ▪ Time offset for input/output signal: 7 μs 	measurement range A/AC: 0.05 - 100 A Pole piece dia.: 2.69mm
Power Stabilizer: Input voltage range: 4,5VDC up to 18VDC or 10,5 VDC up to 36VDC (power supply connection) Output voltage: constant 12VDC	Accuracy: 3%	Min. surface speed 50m/sec
Ethernet Switch: 10/ 100 Mbit/s; 5x RJ45 socket; Autocrossing, Autonegotiation, Autopolarity	over voltage category: CAT IV 300V	Operating temperature: -55°C to 120°C
		Inductance: 25mH max.
	power supply: 9 V battery or power adapter	Max. operating frequency: 50kHz
	Dimensions: (L x B x H) 231 x 36 x 67 mm	Vibration: meets Mil-Std 202F Method 204D