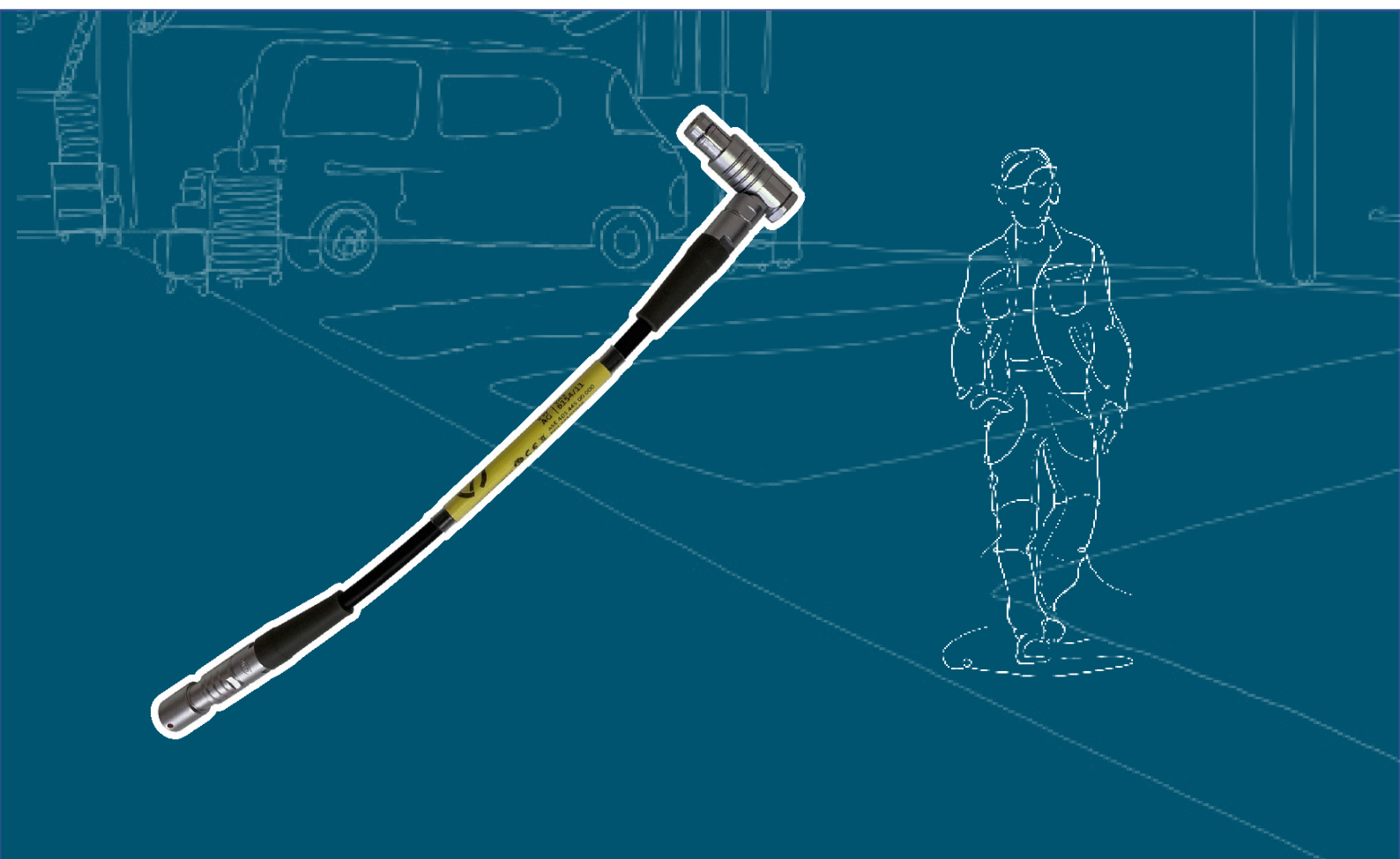


# VOLKSWAGEN

AKTIENGESELLSCHAFT



## Operating manual

Angle adapter VAS 6154/11



Revision	Date	Reason
<b>V00</b>	05.05.2021	First edition

## Legal notice

### Manufacturer

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### Reproduction

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### Image sources

Symbols for warnings, prohibitions, mandatory actions and standards are taken from publicly accessible sources, such as the Internet. CAD product images and product photos are provided by the manufacturer. Images showing the product in use are provided with a reference to the source.

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## Preliminary information

Read through this operating manual carefully before using the product.

The product is delivered with a USB stick containing the operating manual in various languages. You can find the current version and additional languages on our homepage.

The operating manual is an essential part of the product and must be kept together with the product. If you sell or transfer ownership of the product, the operating manual must be handed over to the new operator.

In addition to this operating manual, you must observe all relevant regulations for diagnostics or troubleshooting of intrinsically safe high-voltage systems in road vehicles. This includes but is not limited to: instructions for the vehicle manufacturer's diagnostics systems, company-specific safety requirements and the state of the art for working with high-voltage systems.

## Validity of the declaration of conformity

The declaration of conformity applies to the product described in the operating manual. Any changes, modifications or extensions shall void the declaration of conformity and the risk assessment.

## Manufacturer specifications

### CAR-connect GmbH



Since its founding, our company has focused on groundbreaking solutions for electromobility. CAR-connect develops and produces custom solutions for the automotive industry, repair shops and special vehicle fleets.

Our core business is developing and producing innovative high-voltage charging technology for electric vehicles. Our portfolio also includes measurement and diagnostic technology for the entire vehicle and battery analysis equipment.

With extensive experience in software and hardware development, CAR-connect is your dependable partner at every production stage, from prototyping to series production.

CAR-connect GmbH – Experience, Expertise and Innovation – MADE IN GERMANY

This safety chapter provides information about the following:

- The warning levels contained in this operating manual
- Important safety instructions for the product
- Intended use of the product
- Requirements for the target group
- Duties of the operator

This operating manual is only valid for the following product:

Item number	22103099
Designation	Angle adapter VAS 6154/11

## Warning levels

This chapter provides information about the warning levels used in this operating manual.

### **DANGER**

Failure to observe the safety instructions **WILL** result in death or serious injury!

### **WARNING**

Failure to observe with the safety instructions **CAN** result in death or serious injury!

### **CAUTION**

Failure to observe the safety instructions **CAN** result in minor physical injury!

## Important safety instructions

This chapter contains the safety instructions that must be observed when handling the product.



### WARNING

#### Danger of fatal electric shock!

The electrical voltage in other systems is lethal and can cause death by electric shock!

- Do not use the product for measurements on utility power circuits!
- Never attempt to power other devices with the product!



### CAUTION

#### Danger of electric shock!

The electrical voltage in the product is dangerous and can cause mild injury from electric shock!

Liquids, condensation and high humidity can cause short circuits!

- Do not let the product come into contact with liquids!
- Use the product only in dry and enclosed spaces!



### CAUTION

#### Danger of electric shock!

The electrical voltage in the product is dangerous and can cause mild injury from electric shock!

Defective and damaged products cannot guarantee protection against electrical voltage!

- Do not let the product come into contact with chemicals!
- Replace a defective or damaged product immediately!
- Never attempt to repair or tamper with the product!

## Intended use

The angle adapter connects the VAS 6154/VAS 6154A diagnostics interface to the USB socket of the VAS 6150C/D/E and VAS 6160B/C/E diagnostics systems.

The angle adapter should remain permanently attached to the diagnostics system to ensure that the user connects the diagnostics interface to the angle adapter's USB socket using both hands and not the USB socket on the diagnostics system.

Use only the plug connections that the manufacturer has specified in the guided fault finding.

In this operating manual, vehicle manufacturers are exclusively defined as vehicle manufacturers in the Volkswagen Group.

Any use beyond what is listed here is prohibited.

## Requirements for the target group

Only qualified personnel may work with this product!

In this operating manual, qualified personnel is defined as personnel meeting all requirements for working on motor vehicles and their diagnostics systems that are applicable in the country of operation, as defined by:

- Regulations applicable in the country of operation
- Specifications from the vehicle manufacturer and/or the operator.

At all times while using the product, staff must wear the personal protective equipment prescribed by the vehicle manufacturer for work on motor vehicles and their diagnostics systems.

## Duties of the operator

The operator is responsible for ensuring that all staff working with the extension cable fulfills the requirements for the target group.

Furthermore, the operator is responsible for ensuring the following:

- The extension cable is always in perfect working order.
- The regular inspection intervals for the extension cable are observed and recorded.

## Scope of delivery

Immediately check the condition of the product and the completeness of the delivery. If anything is missing or defective, please contact the manufacturer immediately.



- (1) Angle adapter
- (2) USB stick with operating manual

## Design

Product design:








- (1) USB socket for diagnostics interface
- (2) USB plug for diagnostics system

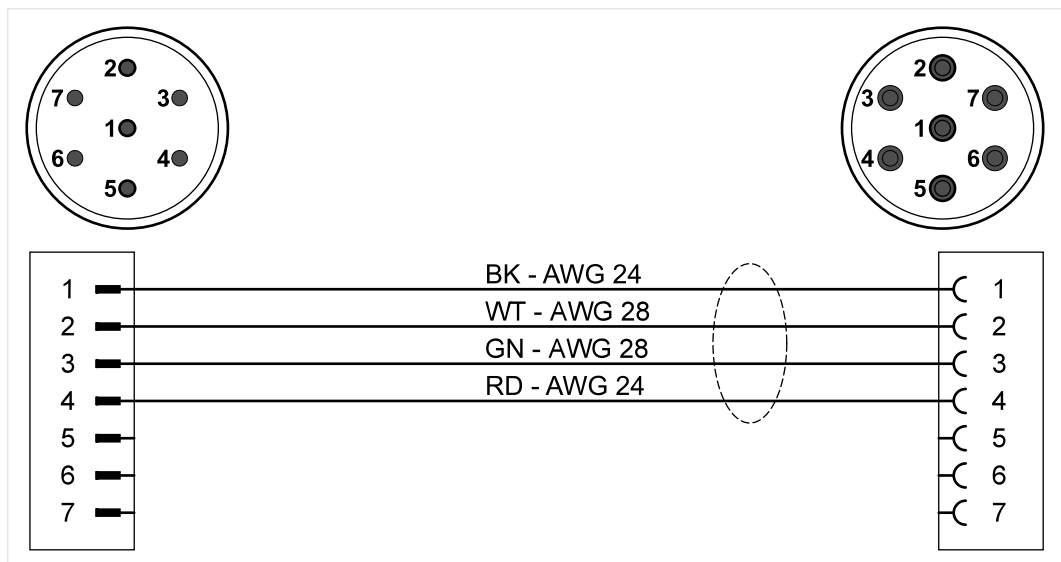


## Symbols and connections

The following symbols are shown on the product:

Symbol	Meaning
	Observe the operating manual!
	The manufacturer part number is used in conjunction with the serial number to identify the product.
	The disposal instructions prohibit disposal of the product with household waste. Always dispose of the product in accordance with all local disposal regulations.
	The CE marking certifies that the product complies with all applicable European regulations and has been subjected to the prescribed conformity assessment procedure.
	The test seal identifies the product as having been approved for use in workshops and production facilities belonging to the vehicle manufacturer.

## Wiring diagram



## Technical data

Rated data	Values
Manufacturer number	22103099
Maximum rated voltage	DC 5.2 V
Maximum rated current	500 mA
Weight	~ 40 g
Total length	250 mm

Ambient conditions	Operation	Storage	Transportation
Temperature	0 °C to 50 °C	-20 °C to 60 °C	-20 °C to 60 °C
Elevation above sea level	Max. 2000 m	No limitation.	
Humidity	Max. 80 % up to 31° C, decreasing linearly to 50 % at 40° C	Max. 85 %	
	Condensation not permitted. Maximum permissible relative humidity: 60 % in environments with corrosive gas/air.		

This section provides information about the following activities:

- Startup
- Cleaning
- Storage
- Disposal
- Maintenance



## CAUTION

### Danger of electric shock!

The electrical voltage in the product is dangerous and can cause mild injury from electric shock!

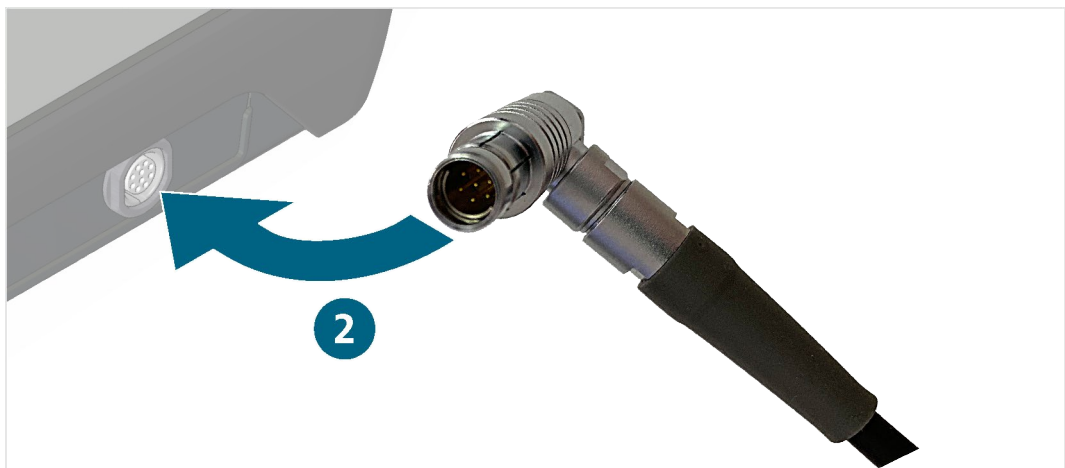
- Use the product only for the applications intended by the vehicle manufacturer!

## Startup

1. Observe the safety instructions.



2. Connect the USB plug to the USB socket on the diagnostics system. Make sure that the USB plug locks securely into place!



- ✓ You can now connect the diagnostics interface to the angle adapter.

## Cleaning

- Observe the safety instructions!
- Use only a dry cloth to clean the product.

## Storage

- Store the product in a dry and dust-free location when not in use.

## Disposal

- Observe the safety instructions!
- Always dispose of the product in accordance with all local disposal regulations.

## Maintenance

- Observe the safety instructions!
- National and local requirements for regular testing must be observed!
- Test the product for proper function at intervals of no more than 24 months.
- Contact the manufacturer to have a professional function test performed.

## Warranty

CAR-connect GmbH grants a warranty period of 24 months from the date of purchase. The warranty is valid for demonstrable defects in functional material and workmanship.

Further information on the warranty conditions can be found in the terms and conditions on the manufacturer's website.

## Customer service

Always include the serial number with any product queries. This number is found on the product.

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