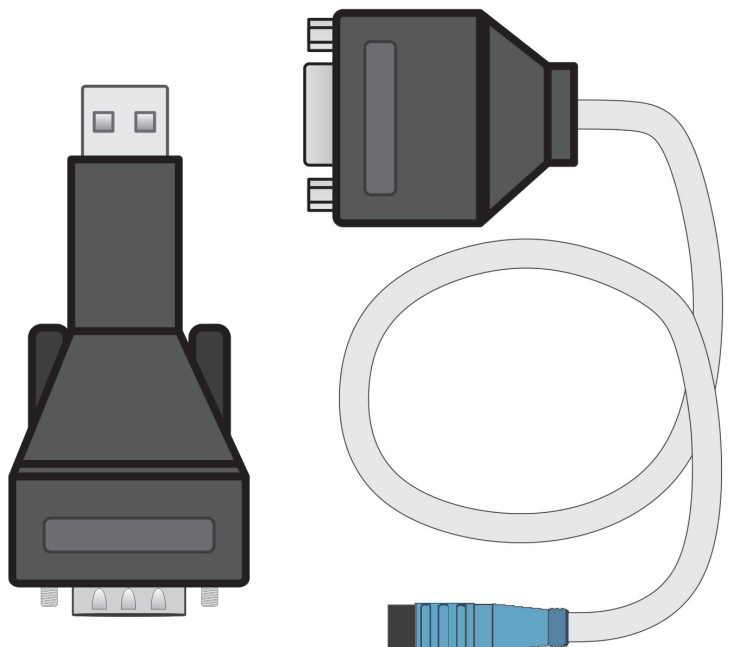




Technology for Vacuum  
Systems

# COMMUNICATION KIT

*USB VACUU·BUS® converter  
for communication with  
VACUU·BUS®-enabled devices*



## Instructions for use



## **Original instructions Keep for further use!**

*This manual is only to be used and distributed in its complete and original form. It is strictly the user's responsibility to carefully check the validity of this manual with respect to the product.*

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*Thank you for purchasing this product from **VACUUBRAND GMBH + CO KG**. You have chosen a modern and technically high quality product.*

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# 1 Introduction

## 1.1 User information

User information This manual is part of your product. The illustrations and drawings in this manual are only intended to facilitate comprehension. We reserve the right to make technical changes in the course of continuous product improvement. Only use the product if it is in perfect working condition.

In addition, refer to the original instructions for the connected devices.

## 1.2 Copyright

Copyright The content of this manual is protected by copyright. Only copies for internal use are allowed, e.g., for professional training.

© VACUUBRAND GMBH + CO KG

## 1.3 Symbols and icons

This manual uses symbols and icons. Safety symbols indicate specific risks associated with handling the product. Symbols and icons are designed to help you identify risks more easily.

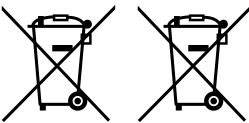
Meaning of symbols



General mandatory sign.



Disconnect power plug.



Electric/electronic devices must not be disposed of in domestic waste at the end of their service life.



Refer to manual.



Graphic symbol for connector.



Graphic symbol for socket.

## 1.4 Disposal

### NOTE

**Incorrect disposal of electronic components can cause environmental pollution.**

Used electronic devices contain harmful substances that can cause damage to the environment or human health. Disused electrical devices also contain valuable raw materials, which can be recovered for reuse if the device is disposed of correctly within the recycling process.

End users are legally obliged to take used electric and electronic devices to a licensed collection point.

- ⇒ Correctly dispose of all electronic scrap and electric components at the end of their service life.
- ⇒ Observe the national regulations regarding disposal and environmental protection.



## 2 Product description

**Intended use** The *Communication Kit* is a set consisting of various cable adapters intended for connecting VACUU·BUS components to a terminal device.

**Function** The *Communication Kit* is used for communication between a terminal device, e.g., a PC, laptop, control panel, or PLC, and VACUU·BUS-enabled devices. It can be used for firmware updates, remote control, or remote monitoring.

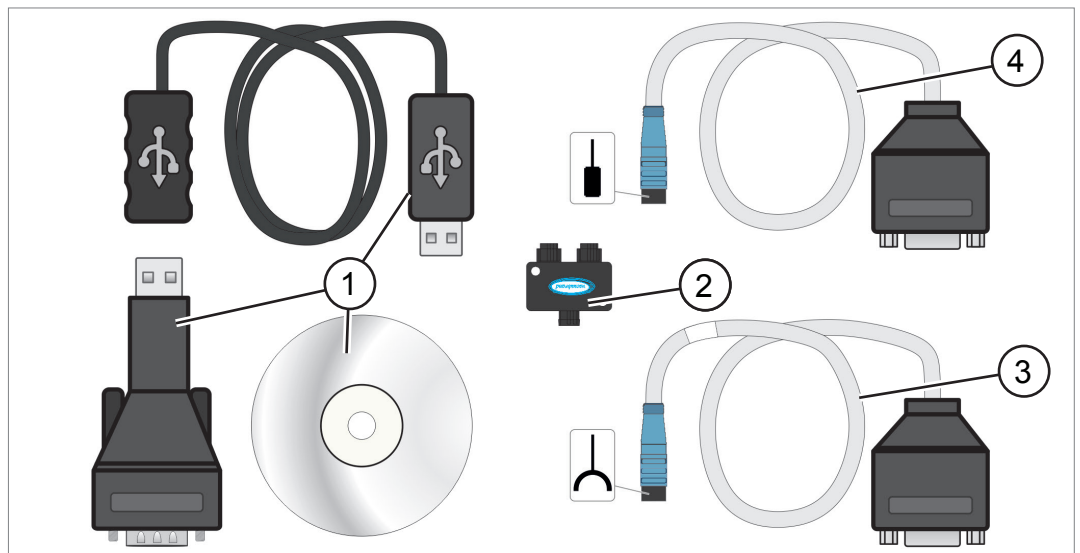
### 2.1 Communication Kit

**Description of components** The *Communication Kit* consists of a USB VACUU·BUS converter (1), various cable adapters (3) and (4), and a VACUU·BUS Y adapter (2).

The cable adapter (3) labeled **VACUU PURE ONLY** is intended solely for communicating with and updating VACUU·PURE vacuum pumps. The other cable adapter (4) is intended for updating and communicating with suitable VACUU·BUS components.

### Components

**Overview of components**



**Description**

- |   |   |
|---|---|
| 1 | D-sub 9 pin RS-485 connector/USB adapter + USB/USB extension cable (type A) + CD ROM with drivers |
| 2 | VACUU·BUS Y adapter   |
| 3 | Cable adapter: VACUU·BUS socket/D-sub<br>→ only for VACUU·PURE                                    |
| 4 | Cable adapter: VACUU·BUS connector/D-sub  |

**Standard delivery**

In the package

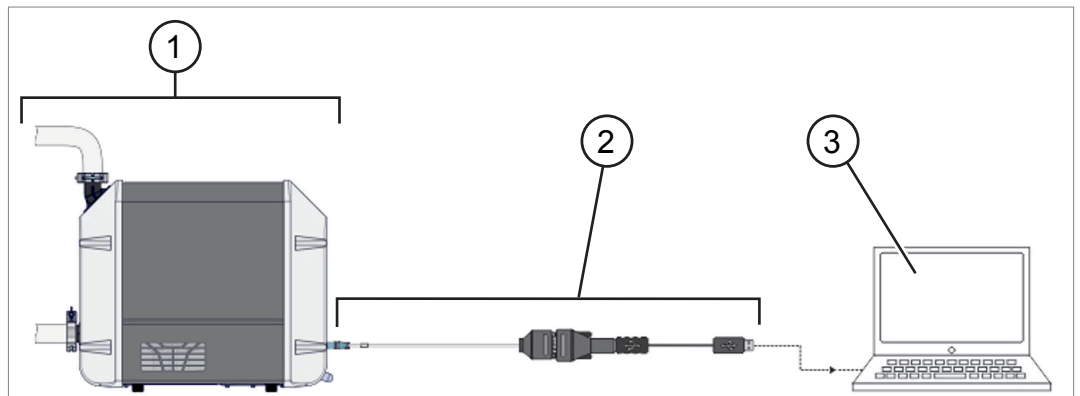
<b>1x</b> Communication Kit	20683230
<b>1x</b> Instructions for use	20901425
<b>1x</b> Original packaging	-----

**2.2 Connection examples**

**2.2.1 VACUU·PURE update**

**VACUU·PURE – firmware update**

→ Example  
VACUU·PURE  
update



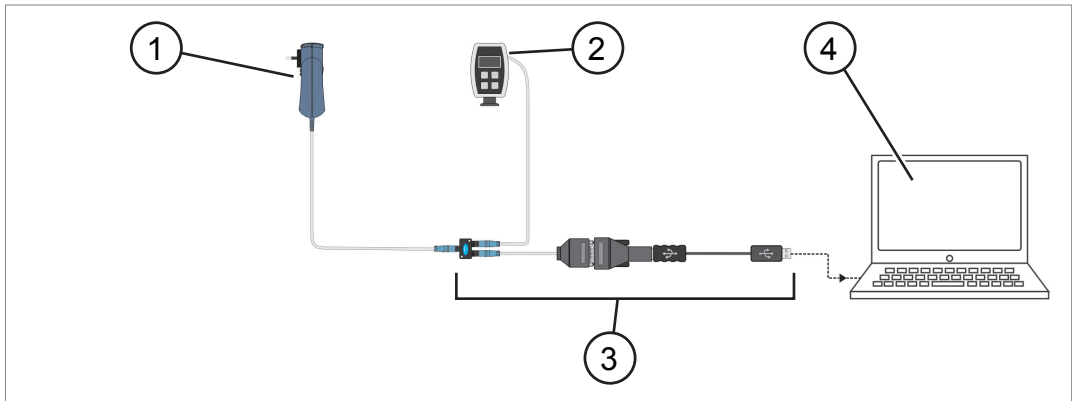
<b>1</b> VACUU·PURE vacuum pump
<b>2</b> Communication Kit with cable adapter for VACUU·BUS socket/ D-sub
<b>3</b> Laptop or PC



## 2.2.2 VACUU·BUS component update

### Vacuum sensor – firmware update

→ Example Vacuum sensor update

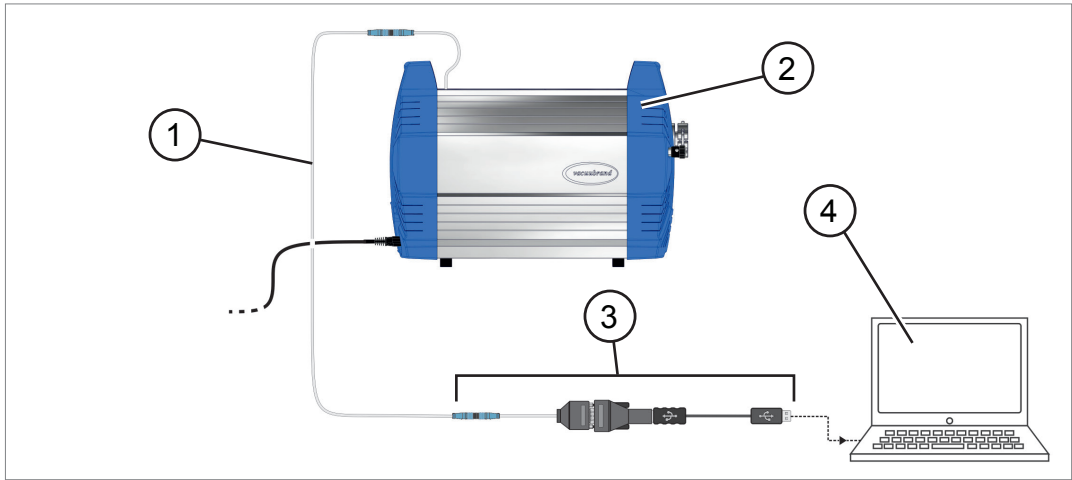


Description

- 1 Plug-in power supply 24 V
- 2 VACUU·VIEW vacuum sensor
- 3 Communication Kit with cable adapter for VACUU·BUS connector/D-sub and Y adapter
- 4 Laptop or PC

### Vacuum pump – firmware update

→ Example Vacuum pump update



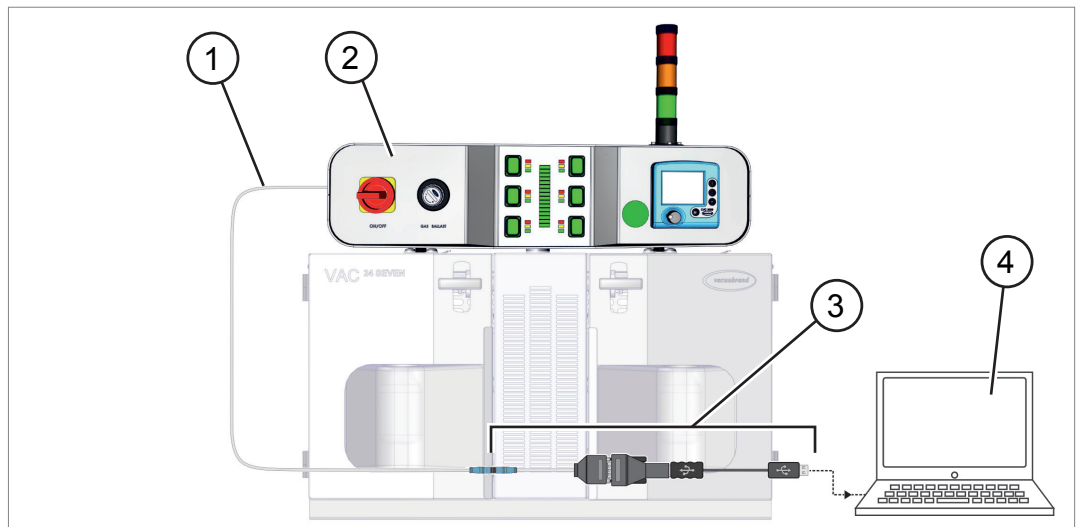
Description

- 1 VACUU·BUS extension cable, optional
- 2 Vacuum pump\*
- 3 Communication Kit with cable adapter for VACUU·BUS connector/D-sub
- 4 Laptop or PC

\* Only VARIO select vacuum pumps with 8 cylinders.

### Control module – control board firmware update

→ Example  
VAC 24seven  
control module  
update

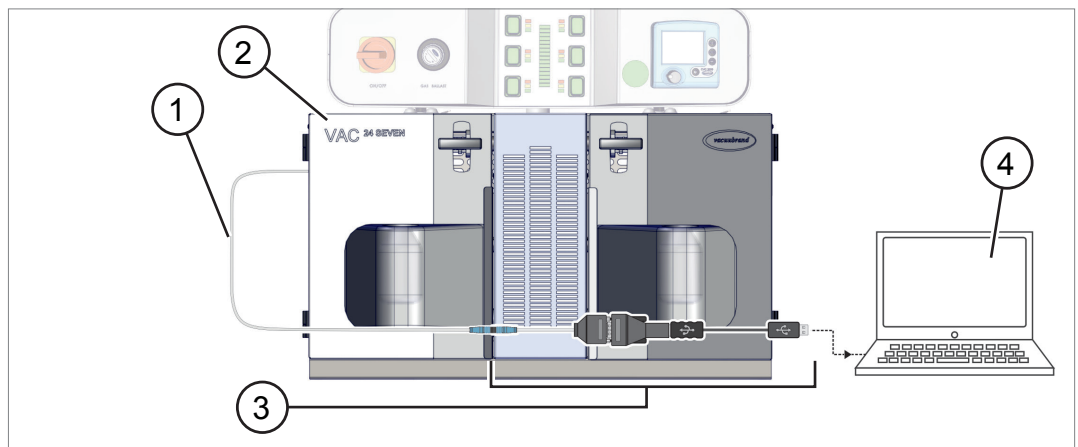


Description

- 1 VACUU·BUS extension cable, optional
- 2 VAC 24seven control module
- 3 Communication Kit with cable adapter for VACUU·BUS connector/D-sub
- 4 Laptop or PC

### Pump module – single vacuum pump firmware update

→ Example  
VAC 24seven  
pump module  
update



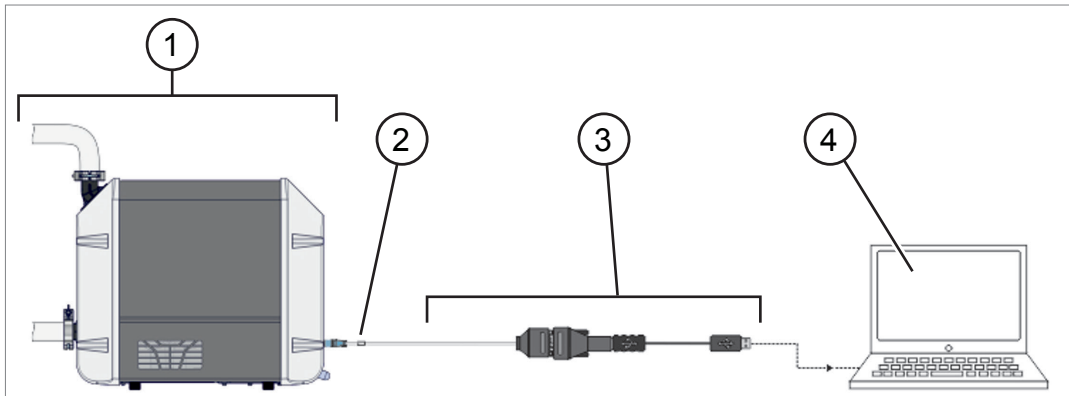
Description

- 1 VACUU·BUS extension cable, optional
- 2 VAC 24seven pump module
- 3 Communication Kit with cable adapter for VACUU·BUS connector/D-sub
- 4 Laptop or PC

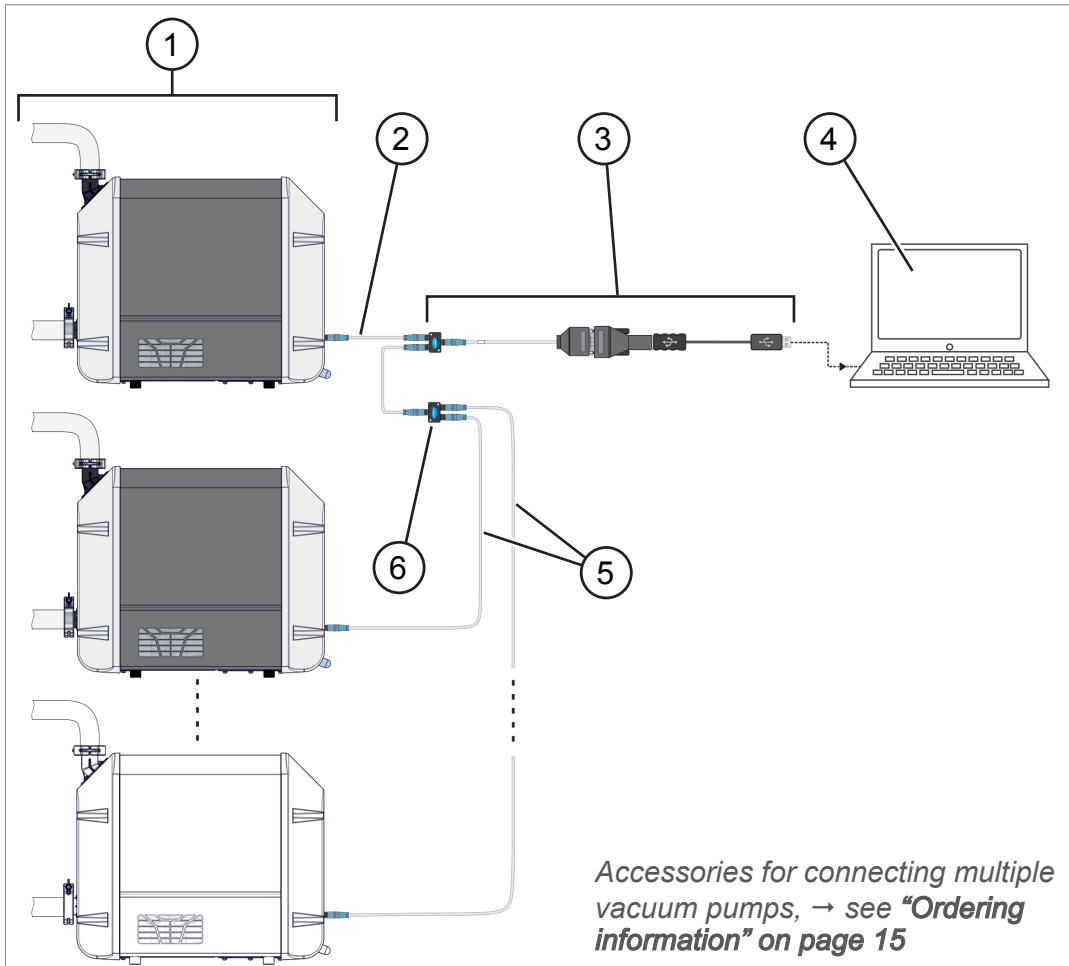
### 2.2.3 VACUU·PURE data transfer

#### VACUU·PURE communication

→ Example  
Communication with  
a single vacuum  
pump



→ Example  
Communication with  
multiple vacuum  
pumps



Description

1	VACUU·PURE vacuum pump
2	VACUU·BUS extension cable, optional
3	Communication Kit with cable adapter for VACUU·BUS socket/ D-sub
4	Host computer, e.g., laptop or PC
5	VACUU·BUS extension cable
6	VACUU·BUS Y adapter



## 3 Connection

### 3.1 Cable adapters, general

#### Connect cable adapters



1. Disconnect the device power plug or switch off the power switch.
2. Connect all required components of the Communication Kit as shown in the illustrations in chapter 2.2.
3. Connect the VACUU·BUS connector or socket to the corresponding VACUU·BUS port on the device.
4. Connect the USB adapter to a free USB port on your terminal device and, if required, install the driver software from the enclosed CD ROM.



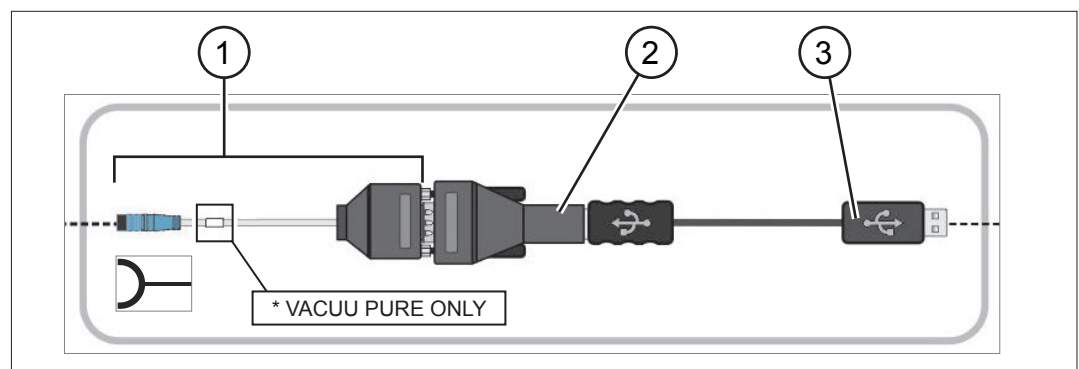
5. Refer to the manual of the VACUU·BUS component or your laboratory software for how to install an update or establish data transfer.

### 3.2 VACUU·PURE

The cable adapter labeled **VACUU PURE ONLY** is intended solely for VACUU·PURE vacuum pumps for updates and as a Modbus RTU interface. Communication can only be established with suitable software, e.g., LabVIEW, Modbus Poll, etc.

#### Cable adapter with VACUU·BUS socket

→ Example  
View of installed  
cable adapter



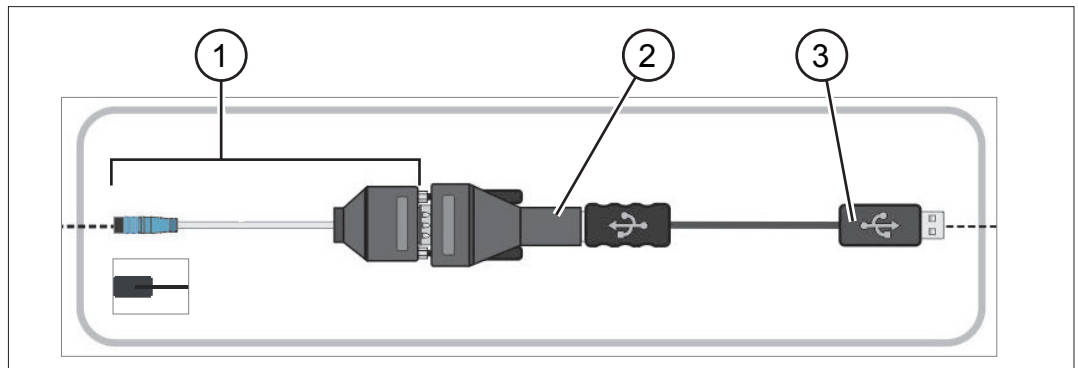
- |   |  |
|---|--|
| 1 | Cable adapter for VACUU·BUS socket/D-sub |
| 2 | RS-485 / USB-A adapter                   |
| 3 | USB-A extension cable                    |

### 3.3 VACUU·BUS component

The unmarked cable adapter is intended for suitable VACUU·BUS components for updates and as a data transfer interface, e.g., for reading out values.

#### Cable adapter with VACUU·BUS connector

→ Example  
View of installed  
cable adapter



- 1 Cable adapter for VACUU·BUS connector/D-sub
- 2 RS-485 / USB-A adapter
- 3 USB-A extension cable

## 4 Service

### Technical support

For technical assistance or in the event of an error, please contact our [Service Department](#)<sup>1</sup>.

### Updates



If an update is available for your device, you will be able to download it from our homepage.

[VACUUBRAND > Support > Software Updates](#)

### Ordering information

Ordering information

Product	Order no.
Communication Kit	20683230
Accessories, optional	Order no.
VACUU·BUS Y adapter	20612875
Extension cable VACUU·BUS, 0.5 m	20612875
Extension cable VACUU·BUS, 2 m	20612552
Extension cable VACUU·BUS, 10 m	22618493

### Sources of supply

Purchase original accessories and original spare parts from a subsidiary of **VACUUBRAND GMBH + CO KG** or your local distributor.



- ⇒ Information about our complete product range is available in the current [product catalog](#).
- ⇒ Your local distributor or **VACUUBRAND GMBH + CO KG** [sales office](#) is available to assist you with orders, questions on vacuum control and optimal accessories.

<sup>1</sup> -> Phone: +49 9342 808-5660, fax: +49 9342 808-5555, [service@vacuubrand.com](mailto:service@vacuubrand.com)

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