



# **Model number**

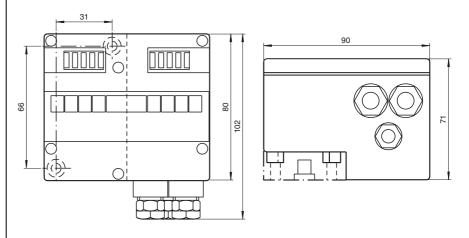
### VAG-PB-G4F-R4

PROFIBUS gateway IP65

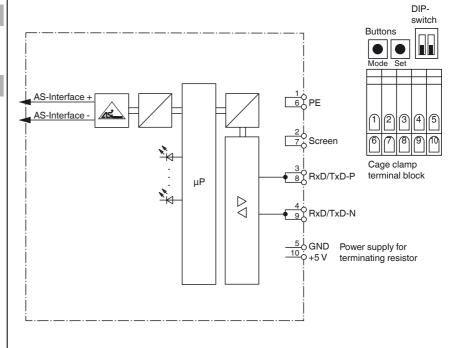
### **Features**

- AS-Interface certificate
- AS-Interface connection via flat cable and EMS standard bottom section (included delivery)
- Protection degree IP65
- Voltage supply from AS-Interface
- Connection to PROFIBUS DP
- Commissioning, without PROFIBUS communication
- All AS-Interface functions possible via PROFIBUS
- · PLC functionality
- Error diagnostics via LEDs and LC display
- Parameterization and monitor software

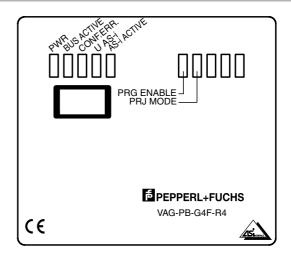
## **Dimensions**



## **Electrical connection**



# **Indicating / Operating means**



Technical data		
General specifications		
AS-Interface specification		V2.0
PLC-Functionality		integrated
Diagnostics function		integrated
Functional safety related para	ameters	
MTTF <sub>d</sub>		140 a at 30 °C
Indicators/operating means		
Display		LED display, 2 digits, for addressing and error messages
LED BUS ACTIVE		PROFIBUS master detected; LED green
LED AS-i ACTIVE		AS-Interface operation normal; LED green
LED CONFIG ERR		configuration error; LED red
LED PWR		voltage ON; LED green
LED PRG ENABLE		autom. programming; LED green
LED PRG MODE		projecting mode active; LED yellow
LED U AS-i		AS-Interface voltage; LED green
Switch SET		Selection and setting of a slave address
Button MODE		Mode selection/save configuration
Electrical specifications		
Insulation voltage	U <sub>i</sub>	≥ 500 V
Rated operating voltage	U <sub>e</sub>	from AS-Interface
Rated operating current	l <sub>e</sub>	≤ 180 mA from AS-Interface
Interface		
Interface type		RS 485
Protocol		PROFIBUS
Transfer rate		9.6; 19.2; 44.44; 93.95; 187.5; 500; 1500 kBit/s self-synchronizing
Connection		
PROFIBUS		Cable gland M16 x 1.5 and cage spring terminals
AS-Interface		cable piercing technology
Ambient conditions		
Ambient temperature		0 55 °C (32 131 °F)
Storage temperature		-25 85 °C (-13 185 °F)
Mechanical specifications		
Protection degree		IP65
Material		
Housing		PA 6 GF30
Mass		420 g
Construction type		Plastic housing with cable gland
Compliance with standards a	nd direct	<b> -</b>

EN 60529

## **Function**

The VAG-PB-G4F-R4 is a complete PROFI-BUS slave designed for use in the field. The G4 field housing of the PROFIBUS gateway offers all the advantages of the serial master in this design.

Two operating modes are available for the exchange of data across PROFIBUS DP: standard and expanded. In standard mode the gateway uses a fixed I/O configuration so that it can be put into operation without additional parameter assignment. In expanded mode the data structure can be optimised, enabling the user to define the data size sent to the PROFIBUS master. Owing to the reduction of required data, less I/O space is needed in the PLC. Two push buttons are used for address assignment, acceptance of the desired configuration, adjustment of the PROFIBUS address and baud rate. In configuration mode, all detected AS-Interface slaves are displayed on the 2-digit LCD. In normal operation, the LCD is blank unless the master detects a faulty AS-Interface slave. There are 7 LEDs on the front panel, showing the current status of the AS-Interface line.

#### **PLC Functionality**

The VAG-PB-G4F-R4 provides 16 kByte program memory, 8 kByte RAM, 1024 counters and 1024 timers for PLC functionality. These capacities suffice to process data on the AS-Interface. Thus the master can also be operated in "stand-alone" mode. The program processing time is 2 ms per 1000 word commands. The programming language is based on the STEP5® programming language. The AS-Interface CTRL functions (upload, download, start, stop, read and write internal memory) are available in expanded mode.

### **Accessories**

## VAZ-SW-ACT32

Full version of the AS-I Control Tools including connection cable

#### **VAZ-PB-SIM**

PROFIBUS master simulator

## VAZ-G4-R4

Interface cable for direct connection of the master to a PC

## U-G1P

AS-Interface module mounting base for connection to round cable (AS-Interface)

PEPPERL+FUCHS

# VAZ-G4-B

Blind plug PG7

#### VAZ-G4-B1

Blind plug M12

## Note

#### U-G1F

base is included with delivery

2014-01-13 Date of issue:

ves

Standard conformity

Protection degree