



**Model number**

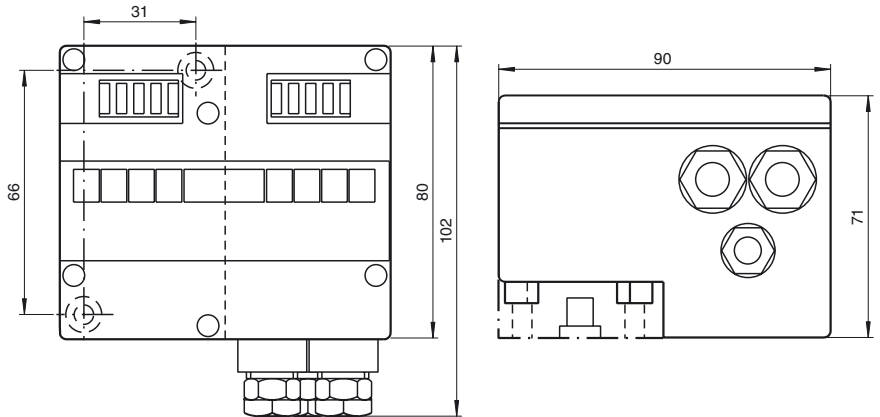
**VAG-PB-G4F-R4**

PROFIBUS gateway IP65

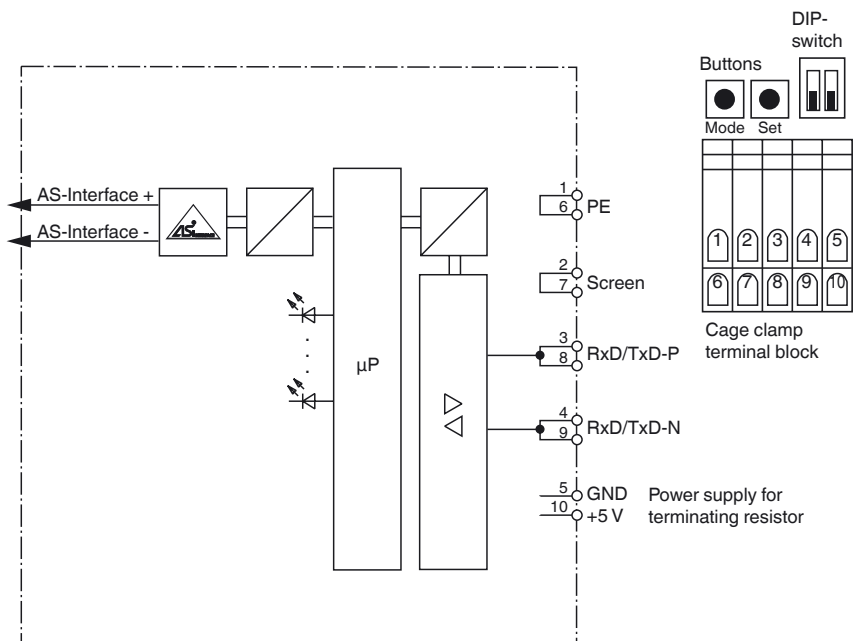
**Features**

- 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

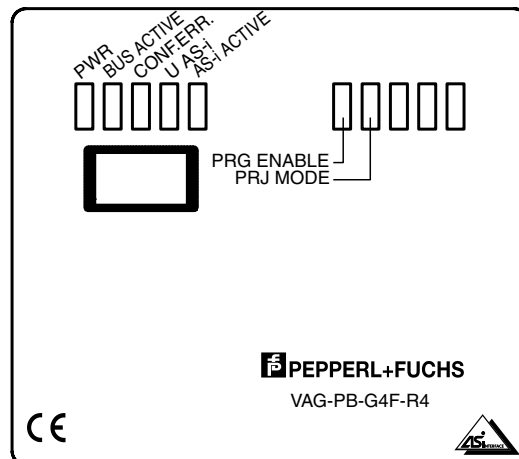
**Dimensions**



**Electrical connection**



**Indicating / Operating means**



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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**Technical data****General specifications**

AS-Interface specification	V2.0
PLC-Functionality	integrated
Diagnostics function	integrated

**Functional safety related parameters**

MTTF <sub>d</sub>	140 a at 30 °C
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**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	$U_i$	$\geq 500$ V
Rated operating voltage	$U_e$	from AS-Interface
Rated operating current	$I_e$	$\leq 180$ 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 and directives**

Standard conformity	
Protection degree	EN 60529

**Function**

The VAG-PB-G4F-R4 is a complete PROFIBUS 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<sup>®</sup> 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)

**VAZ-G4-B**

Blind plug PG7

**VAZ-G4-B1**

Blind plug M12

**Note****U-G1F**

base is included with delivery