Dimensions

Electrical connection

AS-Interface

AS-Interface

AS-Interface Power (PWR)

µP

Sub-D socket
3 RxD/TxD-P
8 RxD/TxD-N
Screen

At the cable for power supply no slaves or repeaters may be attached.
At the cable for AS-Interface circuit no power supplies or further masters may be attached.
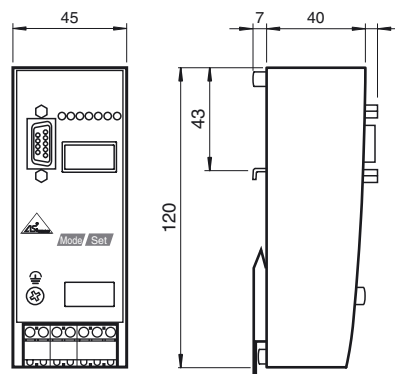
Model number

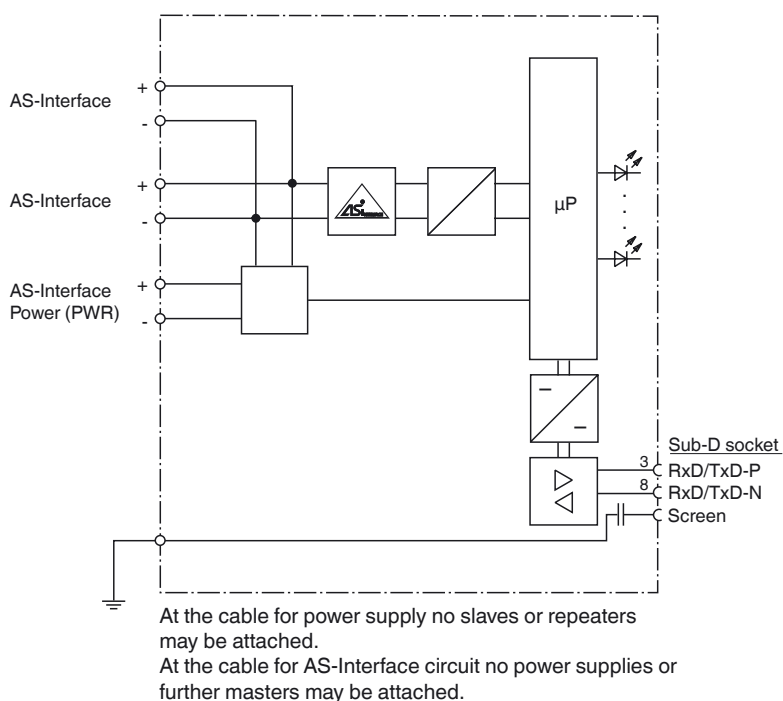**VBG-PB-K25**

PROFIBUS gateway

Features

- Gateway compliant with AS-Interface specification 3.0
- Compact stainless steel housing
- 7-segment display of addresses and error messages
- Connection to PROFIBUS DP
- Commissioning, without PROFIBUS communication
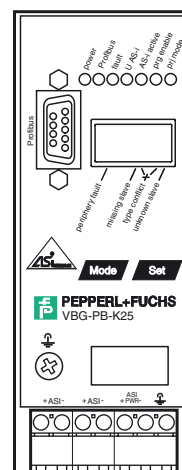- All AS-Interface functions possible via PROFIBUS

Indicating / Operating means

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

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Technical data

General specifications

AS-Interface specification		V3.0
PLC-Functionality		activateable
Earth fault detection	EFD	integrated
EMC monitoring		integrated
Diagnostics function		integrated
UL File Number		E223772

Functional safety related parameters

$MTTF_d$		105 a at 30 °C

Indicators/operating means

Display		address display, error message LED display, 3 digits, for addressing and error messages
LED PROFIBUS		PROFIBUS master detected; LED green
LED AS-i ACTIVE		AS-Interface operation normal; LED green
LED CONFIG ERR		configuration error; LED red
LED PRG ENABLE		autom. programming; LED green
LED POWER		voltage ON; LED green
LED PRJ 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 PRJ-operation/save configuration/cursor

Electrical specifications

Insulation voltage	U_i	≥ 500 V
Rated operating voltage	U_e	from AS-Interface
Rated operating current	I_e	≤ 200 mA from AS-Interface

Interface

Interface type	RS-485
Protocol	PROFIBUS DP V0 and V1
Transfer rate	9.6 kBit/s ... 12 MBit/s , Automatic baud rate detection

Connection

PROFIBUS	Sub-D interface
AS-Interface	spring terminals, removable

Directive conformity

Electromagnetic compatibility	
Directive 2014/30/EU	EN 62026-2:2013

Standard conformity

Electromagnetic compatibility	EN 61000-6-2, EN 61000-6-4
Degree of protection	EN 60529:2000
AS-Interface	EN 62026-2:2013
Shock resistance	EN 61131-2

Ambient conditions

Ambient temperature	0 ... 55 °C (32 ... 131 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)

Mechanical specifications

Degree of protection	IP20
Mass	approx. 460 g
Construction type	Low profile housing , Stainless steel

Function

The VBG-PB-K25 is a PROFIBUS Gateway in accordance with AS-Interface Specification 3.0 and to IP20. The compact construction makes it particularly suitable for use in the control cabinet.

The VBG-PB-K25 is a modular PROFIBUS Slave. This means, that the PROFIBUS configuration tool can be used to determine which data are to be transferred via PROFIBUS. The quantity of data to be transferred via PROFIBUS can be adapted by this means.

This gateway supports the acyclic communication of the PROFIBUS DP V1. With the help of this acyclic service a mail box in the gateway for both AS-Interface masters can be addressed, via which all data made available by the AS-Interface/PROFIBUS gateway can be accessed. Address assignment, acceptance of the set configuration, the setting of the PROFIBUS and baud rate are possible via push button. 7 LEDs, mounted on the front, indicate the current status of the AS-Interface network.

This gateway can be used to keep the commissioning of the AS-Interface circuit, as well as the test of the connected peripherals, completely separate from the commissioning of the PROFIBUS and the programming. Local operation using the LED display and the 2 buttons enables all the functions to be represented, which are covered by the other gateways via the AS-i Control Tools software.

PLC functionality

Optionally the gateway is also available with PLC-functionality. Therefor you can order a code key VAZ-CTR additionally.

Accessories

VAZ-SW-ACT32
Full version of the AS-I Control Tools including connection cable

VAZ-PB-SIM
PROFIBUS master simulator

VAZ-PB-DB9-W
PROFIBUS Sub-D Connector with switchable terminal resistance