



Spec. 3.0

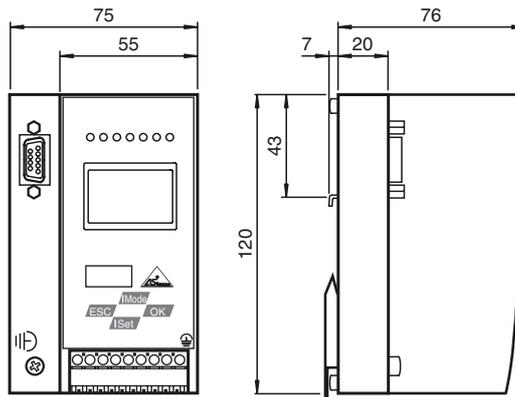
**Model number**

**VBG-PB-K20-DMD-C1**  
 PROFIBUS Gateway, double master for 2 AS-Interface networks

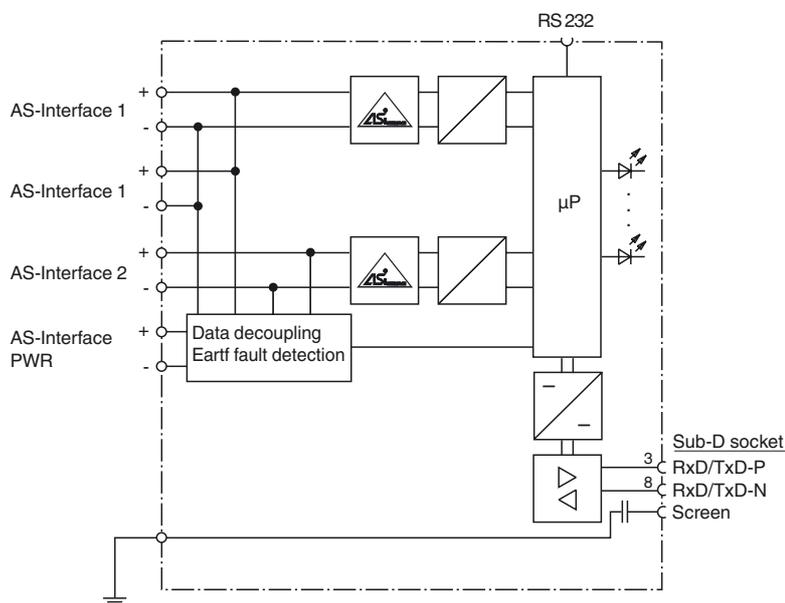
**Features**

- Connection to PROFIBUS DP
- 2 AS-Interface networks
- Integrated data decoupling
- PROFIBUS DP V1 support
- Easy commissioning and fault diagnosis via LEDs and graphic display
- Duplicate addressing detection
- Earth fault detection
- AS-Interface noise detection

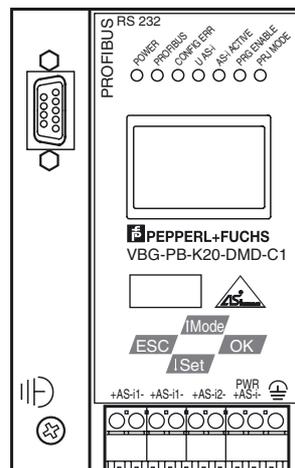
**Dimensions**



**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	V3.0
PLC-Functionality	none
Duplicate address detection	from AS-Interface slaves
Earth fault detection	EFD integrated
EMC monitoring	integrated
Diagnostics function	Extended function via display
UL File Number	E223772

**Indicators/operating means**

Display	Illuminated graphical LC display 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
OK button	Mode selection traditional-graphical/confirmation
Button MODE	Mode selection PRJ-operation/save configuration/cursor
ESC button	Mode selection traditional-graphical/cancel

**Electrical specifications**

Insulation voltage	$U_i$	$\geq 500$ V
Rated operating voltage	$U_e$	from AS-Interface
Rated operating current	$I_e$	$\leq 250$ mA from AS-Interface

**Interface**

Interface type	RS-485
Protocol	PROFIBUS DP 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 61326
Degree of protection	EN 60529:2000
AS-Interface	EN 62026-2:2013

**Ambient conditions**

Ambient temperature	0 ... 55 °C (32 ... 131 °F)
Storage temperature	-15 ... 75 °C (5 ... 167 °F)

**Mechanical specifications**

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

**Notes**

In an AS-Interface network only one device can be operated earth fault detection. If there are many devices in an AS-Interface network, this can lead to the earth fault monitoring response threshold becoming less sensitive.

**Function**

The VBG-PB-K20-DMD-C1 is a PROFIBUS gateway with 2 AS-Interface masters according to AS-Interface specification 3.0 in IP20. Due to integrated decoupling coils, one switching power supply, for example the K24-STR-24...30VDC-10A, can supply 2 AS-Interface lines at the same time. The design is especially suited for use in control cabinets.

The VBG-PB-K20-DMD-C1 is a modular PROFIBUS slave. This means, it is possible to define the data that are to be transmitted via the PROFIBUS using the PROFIBUS configuration tool. This provides for an adaptation of the data volume to be transmitted via the PROFIBUS.

In addition, this gateway supports the acyclic communication of the PROFIBUS DP V1. Using these acyclic services, it is possible to address a mailbox for the two AS-Interface masters in the gateway, via which all the data the AS-Interface/PROFIBUS gateway provides can be accessed.

A button is used to assign addresses, accept of the nominal configuration and set the Profibus address and baud rate. 7 LEDs on the front indicate the actual state of the AS-Interface line.

For AS-Interface gateways with graphical display, the commissioning of the AS-Interface circuit and the test of the connected peripheral equipment can be completely separated from the commissioning of the Profibus and the programming. The local operation via the graphical display and the 4 buttons make it possible to map all the functions on the display that are covered via the Software AS-i Control Tools in all the other AS-Interface masters. An additional RS 232 socket offers the option of reading in data about the gateway, network and function directly from the gateway within the scope of an enhanced local diagnosis.

**PLC Functionality**

Optionally, the gateway can also be supplied with PLC functionality.

**Accessories****VAZ-SW-ACT32**

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

**VAZ-PB-SIM**

PROFIBUS master simulator

**K24-STR-24..30VDC-10A**

Power supply, 24 to 30 V DC, 10 A

**USB-0,8M-PVC ABG-SUBD9**

Interface converter USB/RS 232