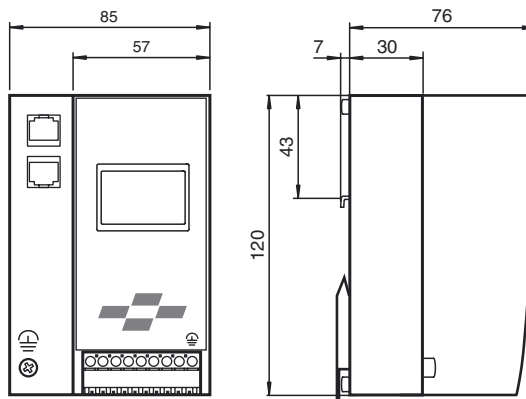
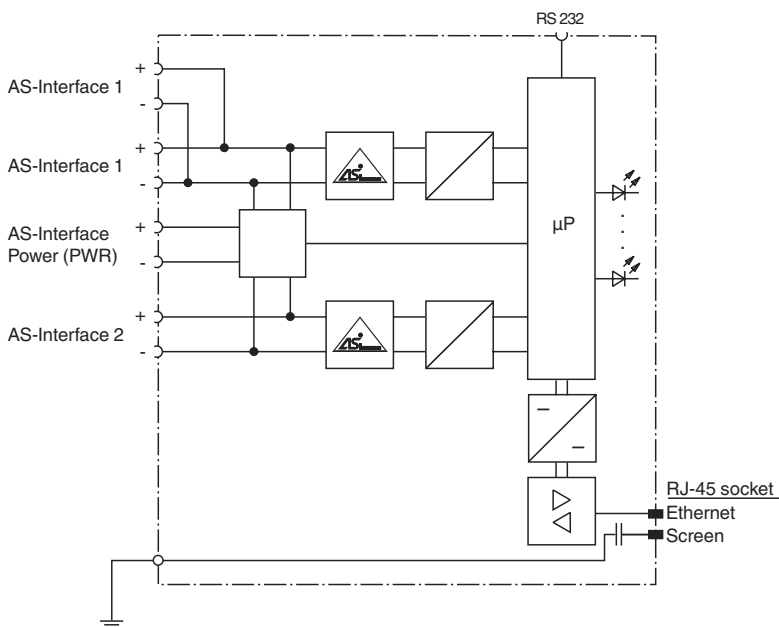




Dimensions



Electrical connection



Model number

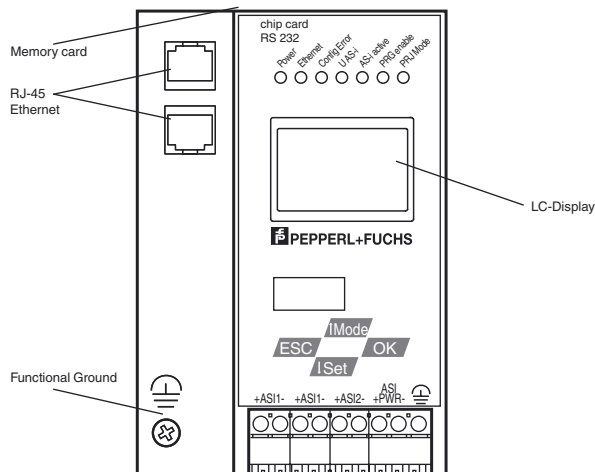
**VBG-PN-K20-DMD-EV**

PROFINET com unit with data decoupling, double master for 2 AS-Interface networks with integrated switch

Features

- Connection to PROFINET IO
- Duplicate addressing detection
- Earth fault detection
- AS-Interface noise detection
- Ethernet diagnostic interface
- 2 AS-Interface networks
- Integrated data decoupling
- Integrated webserver
- Integrated switch allows line topology

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	activateable
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 ETHERNET	ethernet active; 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
Button	4
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 PELV

**Interface 1**

Interface type	PROFINET I / O device (IRT)
Physical	2 x RJ-45
Protocol	Media Redundancy Protocol (MRP)
Transfer rate	10 MBit/s / 100 MBit/s , Automatic baud rate detection

**Interface 2**

Interface type	RS 232, serial Diagnostic Interface
Transfer rate	19,2 kBit/s

**Interface 3**

Interface type	Chip card slot
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**Connection**

PROFINET	RJ-45
AS-Interface	removable spring clamp terminals

**Ambient conditions**

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

**Mechanical specifications**

Degree of protection	IP20
Material	
Housing	Stainless steel
Mass	500 g
Construction type	Low profile housing , Stainless steel

**Compliance with standards and directives**

Directive conformity	
EMC Directive 2004/108/EC	EN 61000-6-2:2005, EN 61000-6-4:2007
Standard conformity	
Electromagnetic compatibility	EN 61000-6-2:2005, EN 61000-6-4:2007
AS-Interface	EN 50295:1999
Degree of protection	EN 60529:2000
Shock and impact resistance	EN 61131-2:2004

**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-PN-K20-DMD-EV is a PROFINET gateway with a double master according to AS-Interface specification 3.0.

The design of the K20 in stainless steel with IP20 is particularly suited for use in switching cabinets for snap on mounting on the 35 mm mounting rail.

The gateway in accordance with the AS-Interface specification V 3.0 is used to connect AS-Interface systems to a higher-level net. It acts as a master for the AS-Interface segment and as a slave for the higher-level net. During cyclic data exchange, the digital data of an AS-Interface segment is transferred. Analog values as well as the complete command set of the new AS-Interface specification are transferred using a command interface.

The address allocation and acceptance of the target configuration can be achieved via the keys. 7 LEDs fitted to the front panel indicate the actual state of the AS-Interface branch.

With the graphical display, the commissioning of the AS-Interface circuits and testing of the connected peripherals can take place completely separately from the commissioning of the higher-level network and the programming. With the 4 switches, all functions can be controlled and visualized on the display.

An RJ-45 Ethernet port provides a way of exporting data relating to the gateway, network and operation directly from the gateway for extended local diagnosis purposes.

Via the RJ-45 Ethernet diagnostic interface, up to 31 devices can establish a secure cross-communication.

The device has a card slot for a memory card for the storage of configuration data.

The integrated data decoupling allows to operate 2 AS-Interface circuits with just a standard power supply.

The redundant power supply guarantees that the double master remains in function and is diagnosticable, when a failure of a power supply unit in one of the two AS-interfaces circles occurs. Also communication with the superior field bus is not disturbed by the failure of a power supply.

**PLC Functionality**

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

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

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

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

Interface converter USB/RS 232