# VBA-8E-G2-ZA



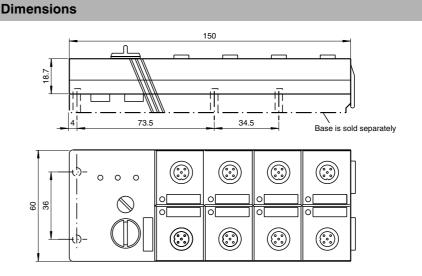
### Model number

### VBA-8E-G2-ZA

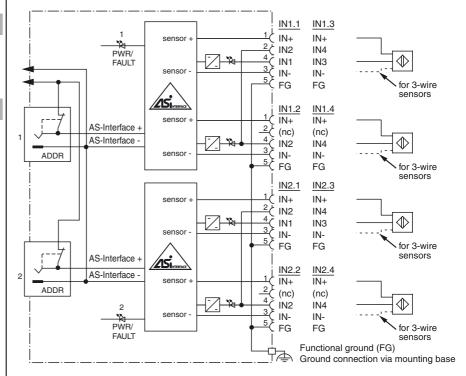
G2 flat module 8 inputs (PNP)

### Features

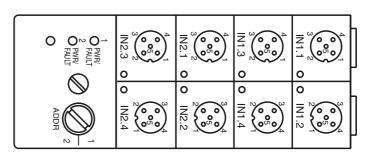
- AS-Interface certificate
- Degree of protection IP67
- Requires two addresses
- Double A/B slave with extended addressing possibility for up to 62 slaves
- Double addressing jack
- Flat cable connection with cable piercing technique, variable flat cable guide
- Communication monitoring
- Inputs for 2-, 3-, and 4-wire sensors
- Supply for inputs from AS-Interface
- Ground connection (FE) possible
- Function display for bus and inputs
- Detection of overload on sensor supply



# **Electrical connection**



# Indicating / Operating means



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

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# AS-Interface sensor module

Technical data	
General specifications	
Slave type	Double A/B slave
AS-Interface specification	V2.1
Required master specification	≥ V2.0
UL File Number	E87056
Indicators/operating means	- · · · · · ·
LED PWR/FAULT	2 dual LED green/red green:AS-Interface voltage red: communication error or address 0 green/red flashing: overload sensor supply
LED IN	switching state (input); 8 LED yellow
Electrical specifications	
Rated operating voltage U <sub>e</sub>	26.5 31.6 V from AS-Interface
Rated operating current I <sub>e</sub>	$\leq$ 80 mA (without sensors) / max. 280 mA
Protection class	III
Input	
Number/Type	2x 4 inputs for 2- or 3-wire sensors (PNP), DC alternative 2x 2 inputs for 4-wire sensors (PNP), DC
Supply	from AS-Interface 21 31 V
Voltage	
Current loading capacity	$\leq$ 200 mA, overload and short-circuit protected $\leq$ 8 mA (limited internally)
Switching point	according to DIN EN 61131-2 (Type 2)
0 (unattenuated)	$\leq 2 \text{ mA}$
1 (attenuated)	$\geq 4 \text{ mA}$
Signal delay	< 2 ms (input/AS-Interface)
Signal frequency	≤ 250 Hz
Programming instructions	
Profile	S-0.A.2
IO code	0
ID code	Α
ID1 code	7
ID2 code	2
Data bits (function via AS-Interface)	Input slave 1 input slave 2
D0 D1	IN1.1 IN2.1 IN1.2 IN2.2
D2	IN1.2 IN2.2 IN1.3 IN2.3
D3	IN1.4 IN2.4
Parameter bits (programmable via AS	
P0	not used
P1	not used
P2	not used
P3	not used
Ambient conditions	
Ambient temperature	-25 60 °C (-13 140 °F)
Storage temperature	-25 85 °C (-13 185 °F)
Mechanical specifications	
Degree of protection	IP67
Connection	cable piercing method flat cable yellow inputs: M12 round connector
Material	
Housing	PBT
Mass	135 g
Mounting	Mounting plate
Compliance with standards and dire ves	cti-
Directive conformity	
EMC Directive 2004/108/EC	EN 61000-6-2:2001, EN 61000-6-4:2001, EN 50295:1999
Standard conformity	EN 61000 6 2:2001
Noise immunity Emitted interference	EN 61000-6-2:2001
AS-Interface	EN 61000-6-4:2001 EN 50295:1999
Input	EN 61131-2:2007
Degree of protection	EN 60529:2000

#### Notes

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With 4-wire sensors, only plug-in slots IN1.1, IN1.3, IN2.1 or IN2.3 can be used from inputs IN1.1+IN1.2, IN1.3+IN1.4, IN2.1+IN2.2 or IN2.3+IN2.4 (jumpered internally).

Do not connect inputs and outputs, which are supplied via the module from AS-interface or via auxiliary power, with power supply and signal circuits with external potentials.

# Function

The VBA-8E-G2-ZA is an AS-Interface I/O module with 8 inputs. Both 2-wire and 3-wire sensors can be connected to the inputs as well as 4-wire sensors and mechanical contacts (for example a pushbutton switch).

The IP67 flat module is ideally suited for use in the field. The module uses two addresses and behaves externally like two separate 4E modules. Inputs 1.1 ... 1.4 are assigned to Slave 1, while inputs 2.1 ... 2.4 are assigned to Slave 2. A double addressing socket is integrated into the module for separate addressing of the two slaves. The slaves must be addressed before the unit is placed in service.

The connection to the sensors is set up by means of M12 x 1-screw connections. An LED is available for each channel to display the current switching status. It is located on the top side of the module. An LED is also available for each of the slaves for monitoring AS-Interface communication and for displaying that a slave has 0 as an address. An overload on the sensor power supply is shown by both LEDs.

By default, the U-G2FF mounting plate is used to connect to the AS-Interface flat cable. This lower section allows for contact with the flat cable from both sides. If input and output modules are used in a single system, the flat cable can also be inserted into the lower section for external power supply. The module will not access this line. The advantage this offers is that both flat cables can be laid essentially in parallel without introducing the danger that an incorrect connection would destroy the module.

#### Note:

The mounting plate for the module must be ordered separately.

#### Accessories

VBP-HH1-V3.0-KIT AS-Interface Handheld with accessory

VBP-HH1-V3.0 **AS-Interface Handheld** 

VAZ-PK-1,5M-V1-G Adapter cable module/hand-held programming device

VAZ-FK-ED-G2 AS-Interface end seal for G2 modules

VAZ-V1-B1 Plug for M12 addressing socket

#### Matching system components

#### U-G2FF

AS-Interface module mounting base for connection to flat cable (AS-Interface and external auxiliary power)

