



**Model number**

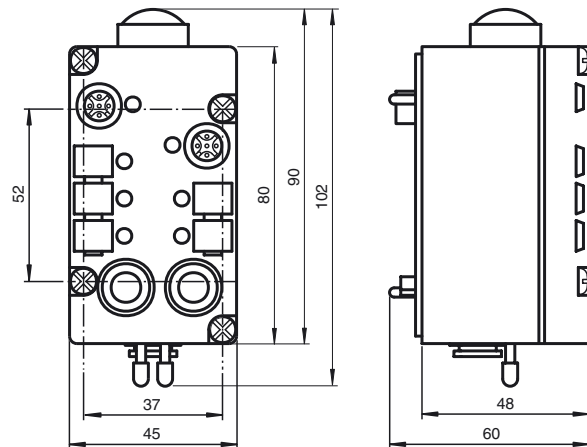
**VAA-4E2A-G1-ZE/P-S**

Pneumatic module  
4 inputs/2 pneumatic outputs

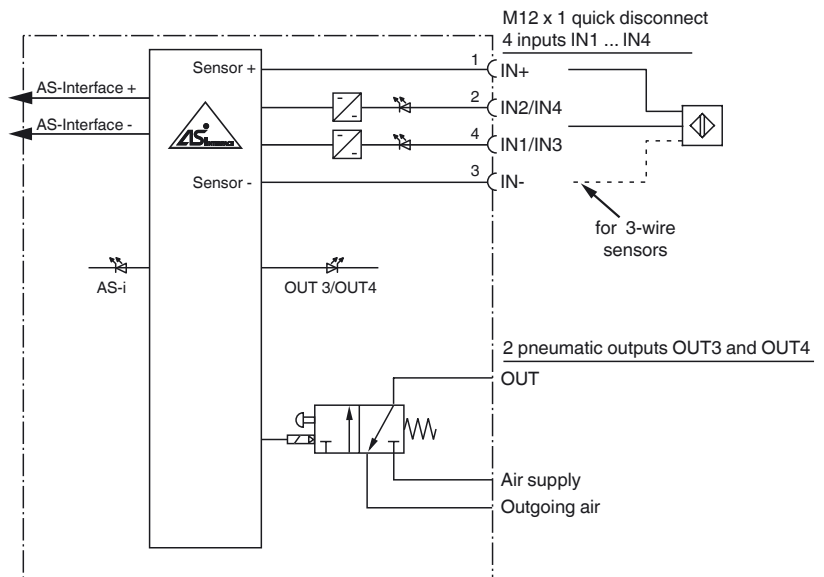
**Features**

- AS-Interface certificate
- Degree of protection IP65
- Flat or round cable connection (via standardized EMS base, not included with delivery)
- Cable piercing method for flat cable
- Inputs for 2- and 3-wire sensors
- Function display for bus, inputs and outputs
- Direct connection of pneumatic cylinders

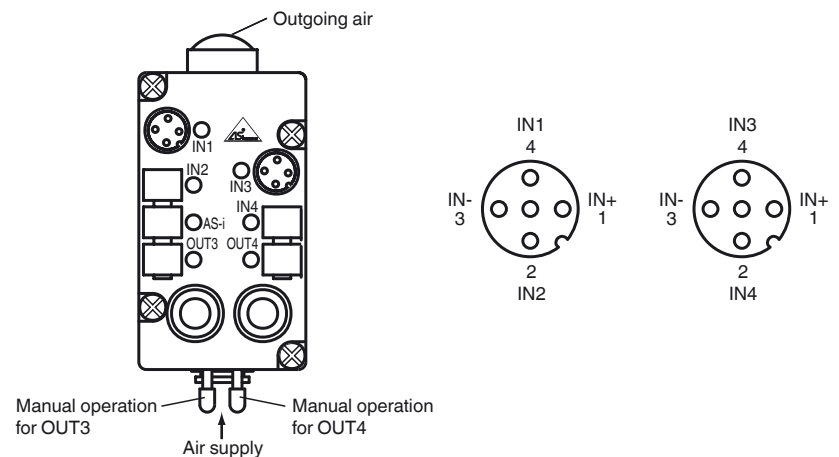
**Dimensions**



**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**

Slave type	Standard slave
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**Functional safety related parameters**

MTTF <sub>d</sub>	44 a
Mission Time (T <sub>M</sub> )	10 a
Diagnostic Coverage (DC)	0 %

**Indicators/operating means**

LED AS-i	AS-Interface voltage; LED green
LED IN	switching state (input); 4 LED yellow
LED OUT	Switching state (output); 2 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>	≤ 45 mA (without sensors) ≤ 200 mA (complete)

**Input**

Number/Type	2x 2 inputs for 2- or 3-wire sensors (PNP), DC
Supply	from AS-Interface
Current loading capacity	≤ 100 mA, short-circuit protected
Switching point	OFF: ≤ 1.5 mA ON: ≥ 5 mA, ≥ 10 V

**Output**

Number/Type	2 pneumatic outputs with separated 3/2-way valves
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**Pneumatic output**

Venting guide	Sinter filter
Compressed air	2 ... 8 bar, filtered (5 µm), oiled or unoled compressed air
Air throughput	550 NI/min at 6/0 bar 350 NI/min at 6/5 bar NI = Standard litre
Valve cross-section	5 mm

**Directive conformity**

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

**Standard conformity**

Degree of protection	EN 60529:2000
AS-Interface	EN 62026-2:2013

**Programming instructions**

Profile	S-7.F
IO code	7
ID code	F
ID1 code	F
ID2 code	F

Data bits (function via AS-Interface)	input	output
D0	IN1	-
D1	IN2	-
D2	IN3	OUT3
D3	IN4	OUT4

**Parameter bits (programmable via AS-i) function**

P0	not used
P1	not used
P2	not used
P3	not used

**Ambient conditions**

Ambient temperature	0 ... 55 °C (32 ... 131 °F)
Storage temperature	-20 ... 85 °C (-4 ... 185 °F)

**Mechanical specifications**

Degree of protection	IP65 according to EN 60529
Connection	cable piercing methos or terminals flat cable or standard round cable inputs: M12 x 1 quick disconnect outputs: plug-in hose connector (8 mm)
Mass	approx. 200 g
Mounting	DIN rail or screw mounting

**Function**

The VAA-4E2A-G1-ZE/P-S module features 4 inputs for the connection of 2- or 3-wire sensors and 2 pneumatic outputs with a high air flow rate for direct control of pneumatic drives in the field. 2 separate 3/2-way valves are integrated in the module. Both the valve and the sensors connected to the module are supplied via the bus cable.

The sensors are connected to the module via M12 x 1-circular connectors; the outputs are connected to the pneumatic drive via standard hose plug-in connectors (LEGRIS LF 3000, 8 mm).

Various bases are available for the module. The U-G1F (or U-G1FA) base provides the connection to the AS-Interface flat cable; the U-G1P base provides the connection to a round cable.

It happens very frequently that output modules must be installed in series with the pneumatic module. If the outputs of the output modules are supplied with external power transferred via a flat cable, a suitable EEMS base (U-G1FF or U-G1FFA) must be used for the pneumatic module. In this case, VAA-4E2A-G1-ZE/P-S accesses the AS-Interface cable instead of the power supply cable.

**Note:**

The slave address must be programmed before commissioning (default setting 0).

Medium: Filtered (5 µm), oiled or unoled compressed air (2 ... 8 bars).

**Warning:**

Dangerous electric voltage can lead to electric shock and burns. The system must be disconnected from the power supply before the beginning of the works.

**Accessories****VBP-HH1-V3.0-KIT**

AS-Interface Handheld with accessory

**VBP-HH1-V3.0**

AS-Interface Handheld

**Matching system components****U-G1F**

AS-Interface module mounting base for connection to flat cable (AS-Interface)

**U-G1P**

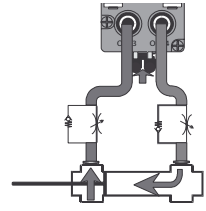
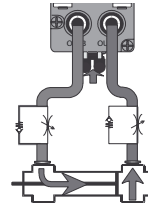
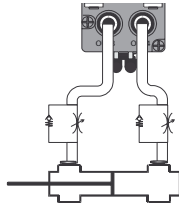
AS-Interface module mounting base for connection to round cable (AS-Interface)

**U-G1FA**

AS-Interface module mounting base with addressing jack for connection to flat cable (AS-Interface)

Notes

Examples for functions of the AS-Interface Airbox



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