

Model number

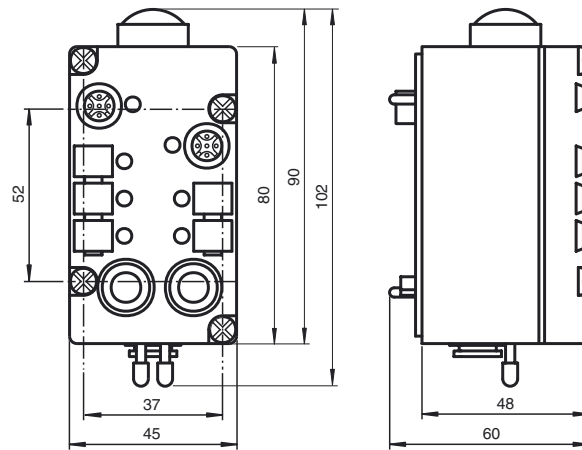
VAA-4E2A-G1-ZE/PEXT-S

Pneumatic module
4 inputs/2 pneumatic outputs

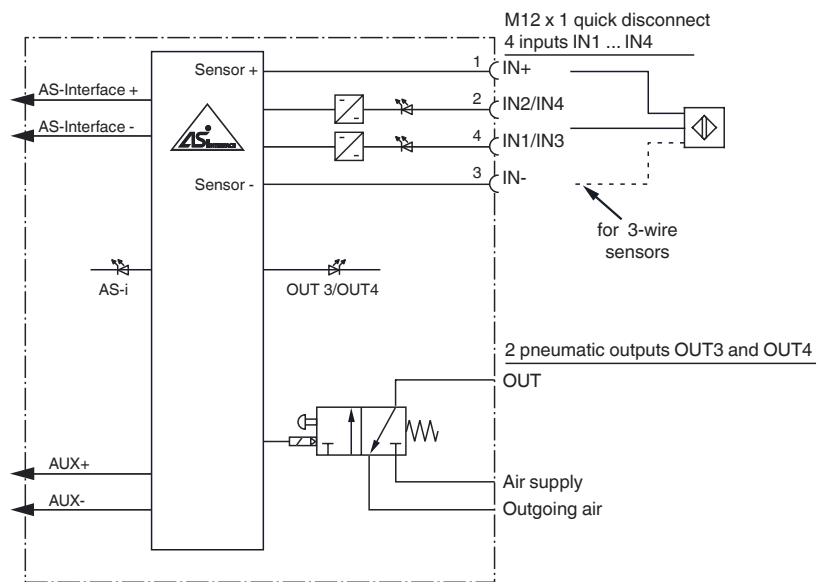
Features

- AS-Interface certificate
- Protection degree IP65
- Flat or round cable connection (via standardized EEMS 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
- External power supply of valves are possible

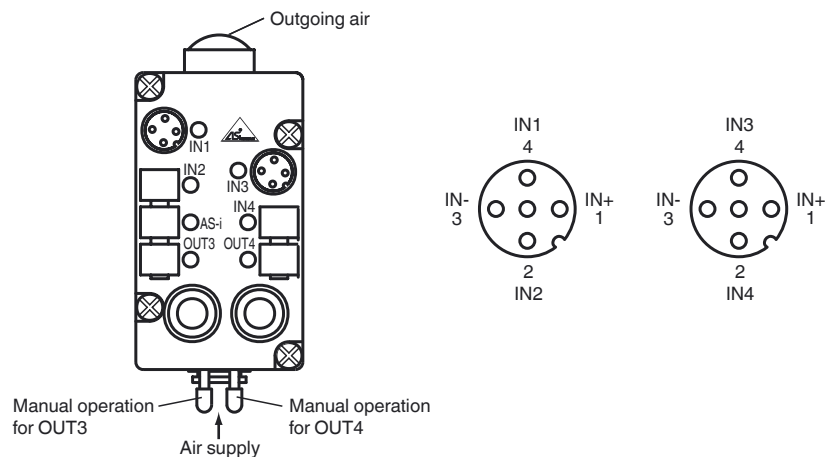
Dimensions



Electrical connection



Indicating / Operating means



Release date: 2011-07-13 15:13 Date of issue: 2014-01-13 130939_eng.xml

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 4411
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

Technical data**General specifications**

Slave type	Standard slave
------------	----------------

Functional safety related parameters

MTTF _d	44 a
Mission Time (T _M)	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 _e	26.5 ... 31.6 V from AS-Interface 24 V DC PELV according to IEC 364-4-41 from external auxiliary voltage U _{AUX}
Rated operating current	I _e	≤ 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
-------------	---

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

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

Protection degree	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/PEXT-S module has four inputs for the connection of 2 or 3 wire sensors and two pneumatic outputs with a high air throughput for direct control of pneumatic drives in the field. The module houses two separate 3/2 port directional control valves. The module as well as the sensors connected are supplied with energy by the bus line. For faster switching action, the valves can be supplied by external power.

By means of the M12 x 2 round connectors, the sensors are connected up to the module; standard hose plug connectors (LEGRIS LF 3000, 8 mm) are used to attach the outputs to the pneumatic drive.

Various base units are available for the module. If the external energy supply of the valves is provided by a flat cable (EEMS), the connection of the AS-Interface is rendered by means of U-G1FF base (or U-G1PP). If the external power supply is provided by a round cable, the connection is established to the U-G1PP base.

Note:

Program the slave address prior to the initial operation (default setting 0).

Medium: filtered (5 µm), oiled or unoled compressed air (2 to 8 bar).

Warning:

Dangerous electric voltage may lead to electric shock and burns. De-energise the plant and the device prior to any work.

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

AS-Interface Handheld with accessory

VBP-HH1-V3.0

AS-Interface Handheld

Matching system components**U-G1FF**

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

U-G1PP

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

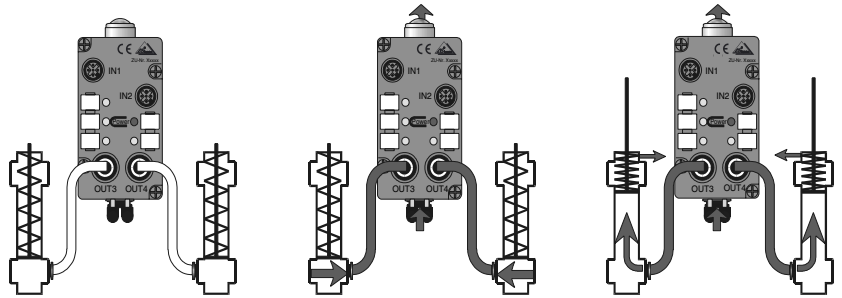
U-G1FFA

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

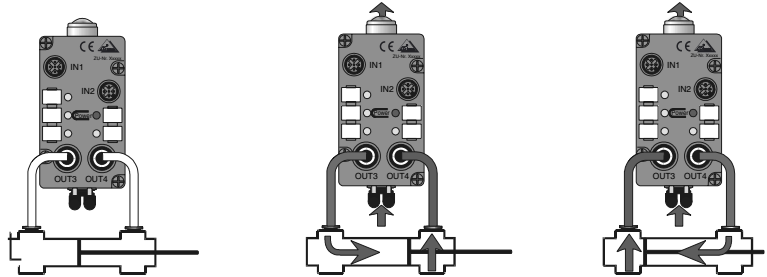
Notes

Examples for functions of the AS-Interface Airbox

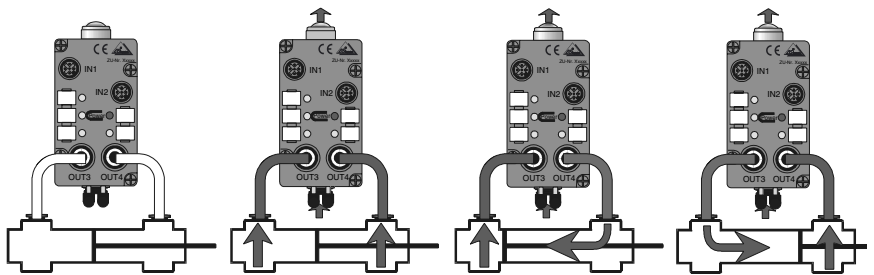
as 3/2-way valve



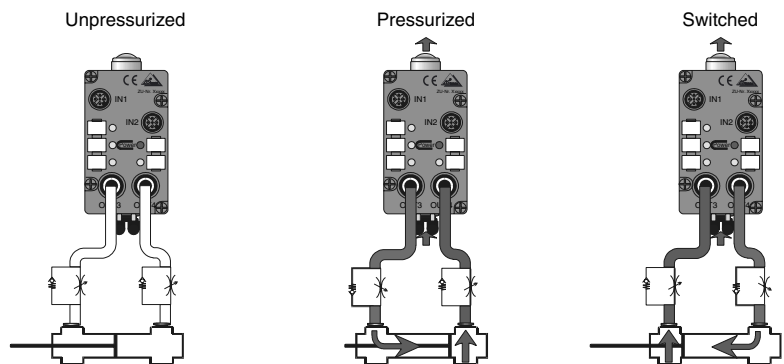
as 4/2-way valve



as 5/2-way valve



as 5/2-way valve



Release date: 2011-07-13 15:13 Date of issue: 2014-01-13 130939_eng.xml